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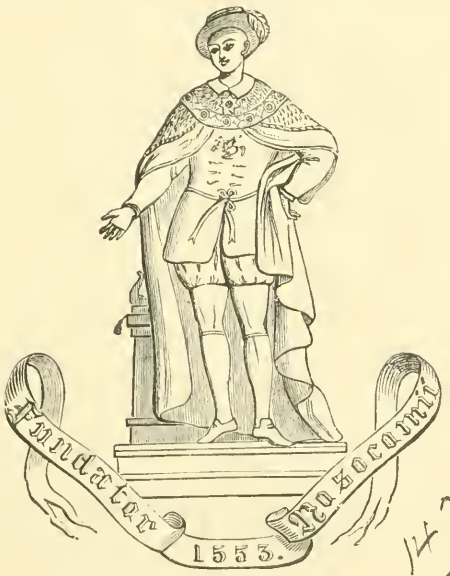

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GENERAL REPORT.

1914.

Combined Medical, Surgical, and Gynæcological Report for 1914

BY

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Surgical Registrar,

AND

J. M. WYATT, M.B., B.S.Lond., F.R.C.S.Eng.,
Obstetric Registrar.

	Males.	Females.	Total
Number of patients in Hospital, Jan. 1st, 1914	238	275	513
,, ,, admitted during 1914	5106	4052	9158
,, ,, discharged during 1914	4774	3764	8538
,, ,, who died during 1914	335	244	579
,, ,, in Hospital, Dec. 31st, 1914	350	204	554

Total mortality . . . . . 6·3 per cent.
Average duration of each patient's stay in Hospital . 21·26 days.

TABLE I.—*Statistical Statement of the Incidence of Diseases*

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
GENERAL DISEASES.																					
1. Anæmias—																					
(*a*) Pernicious anæmia	9													1		1					
(*b*) Splenic anæmia	7	2					1			1	1							2			
(*c*) Chlorosis	4										3				1						
(*d*) Secondary anæmia	7									1									3		
2. Debility	6													3	2			1			
3. (*a*) Diabetes mellitus	19										1				1	1	2	2	3	1	1
3. (*b*) Glycosuria	4		1																		
3. (*c*) Diabetes insipidus	2													1					1		
4. Diphtheria	17	2	4	3	1	1	1		2		2				1						
5. Enteric fever	14		1		1	1	1		1	2	1			2	1		1			1	
6. Erysipelas	27	3	3			1					3			1	2			5	1		
7. Pyrexia	15	2				4	2			2	2				1			2			
8. Gonorrhœa and gonorrhœal rheumatism	12		1							1	1			4	1			3	1		
9. Gout	3																				
10. Influenza	21									2	1			8	3			2	3		
11. Leukæmia—																					
(*a*) Myelæmia	4	1													1				1		
(*b*) Lymphæmia	4								1												
12. Lymphadenoma	8					1					1			1	2	1					
13. Malaria	5													4				1			
14. Marasmus	7	1	2	3	1																
15. Measles	8	3				2	1								2						
16. Pyæmia	3										1					1		1			
17. (*a*) Purpura	12	1					1			4	1				1				2		
17. (*b*) Hæmophilia	2					1				1											
18. Acute rheumatism	66					4	5			8	9			22	2			8	2		
19. Rheumatoid arthritis and chronic rheumatism	27									1	2			4	4			3	3	1	
20. Rickets	2		1		1																
21. Scarlet fever	1													1							
22. Septicæmia	1															1					
23. Syphilis—																					
(*a*) Primary	11									1				6	1			1	1		
(*b*) Secondary	82									3	3			23	18			15	7		
(*c*) Tertiary	24									1				4	2			5	5		
(*d*) Congenital	9	2	1	1						1	2				1				1		
24. Tetanus	5					1															
25. General tuberculosis	6			1	2			1			1		1								
26. Acute abscess	70	6	2		2	3	1			6	6			5	5	1		5	6	1	
27. Chronic abscess	25	1				3	3			4	3			5	2			2	2		
28. Cellulitis	77	2		1		2	1			5	9			10	5			4	8	1	1
29. Sinus	8					1	1								1				1		

and Injuries, Medical, Surgical and Gynæcological.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	1	1	...	1	...	...	...	...	1	...	2	3	2	2	2	185
...	...	...	...	...	...	...	...	...	...	...	...	5	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	
...	1	...	...	1	...	...	...	1	...	...	...	3	4	...	..	38
...	...	...	...	..	...	...	...	...	...	...	...	4	2	...	...	
2	...	1	...	4	...	...	...	..	...	...	...	8	5	3	3	16
2	...	...	...	1	...	...	...	...	...	...	...	3	1	...	...	
..	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	39
...	...	...	...	...	...	...	...	...	...	...	...	3	8	3	3	36, 5, 19
1	...	...	...	...	...	...	...	...	...	...	...	6	4	1	3	4
1	4	...	...	2	1	...	..	...	...	...	...	13	14	...	...	51
...	...	...	...	...	...	...	...	...	...	...	...	10	5	...	...	
...	1	...	...	..	...	...	...	...	...	...	...	8	4	...	...	
...	...	...	...	1	...	...	..	1	1	...	...	2	1	...	...	17 (*a*)
1	...	...	..	..	1	.	.	...	...	...	...	13	8	...	...	57, 179
...	..	...	...	1	...	...	...	...	...	...	...	2	2	...	...	
...	...	1	1	...	1	...	...	...	...	...	...	...	1	1	2	
...	1	...	...	...	...	...	...	...	...	...	...	2	4	2	...	
..	...	...	...	...	...	...	...	...	...	...	..	5	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	1	
...	...	...	...	...	...	...	...	...	...	...	...	5	3	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	3 (*a*), 79
...	1	...	...	...	...	..	...	1	..	...	...	6	6	...	...	9, 88
...	...	...	.	...	...	...	...	...	...	...	...	2	...	...	...	
4	2	...	...	...	...	...	...	..	...	...	...	46	20	...	...	
4	3	...	...	1	1	...	..	...	...	...	...	13	13	1	...	4
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	
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...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
...	...	...	...	..	...	...	...	1	...	...	...	9	2	...	...	8
6	5	...	...	1	1	...	...	..	...	...	...	48	34	...	...	
2	2	.	...	2	1	...	...	...	...	...	...	14	10	...	...	1 (*a*)
...	...	...	...	...	...	...	...	...	...	...	...	3	5	1	...	
...	...	1	...	...	...	2	...	...	...	1	...	...	...	4	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	178
7	2	...	..	4	4	1	..	1	2	...	...	37	28	3	2	
...	...	...	...	...	...	...	...	..	...	...	...	15	10	...	...	
8	3	1	...	6	1	1	...	2	4	1	1	39	31	5	2	
1	1	...	..	1	1	...	...	...	...	...	...	3	5	...	...	

TABLE I—

DISEASE.	Total.	Age. 0— Discha. M.	0— Discha. F.	0— Died. M.	0— Died. F.	5— Discha. M.	5— Discha. F.	5— Died. M.	5— Died. F.	10— Discha. M.	10— Discha. F.	10— Died. M.	10— Died. F.	20— Discha. M.	20— Discha. F.	20— Died. M.	20— Died. F.	30— Discha. M.	30— Discha. F.	30— Died. M.	30— Died. F.
GENERAL DISEASES—*cont.*																					
30. Carbuncle and furuncle	14	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	1	1	1	...	...
31. Various general diseases																					
(*a*) Actinomycosis	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(*b*) Various	6	...	1	...	...	...	...	...	...	...	...	...	...	1	3	...	...	1	...	...	...
DISEASES OF RESPIRATORY SYSTEM.																					
32. Diseases of the nose—																					
(*a*) Deflected septum	121	...	...	...	...	2	2	...	...	19	27	...	.	29	23	...	...	4	9	...	...
(*b*) Enlarged turbinals	12	...	...	...	...	...	...	...	...	2	2	...	...	2	3	...	...	...	2	...	..
(*c*) Various	15	...	...	...	...	...	...	...	...	3	2	...	...	1	3	...	...	2	1	...	...
33. Diseases of antrum and sinus—																					
(*a*) Ethmoiditis	13	...	...	...	...	...	...	...	...	..	2	...	...	1	6	...	...	...	...	...	...
(*b*) Nasal polypi	25	...	...	...	...	...	...	...	...	2	2	...	...	4	1	...	...	6	2	...	...
(*c*) Frontal sinusitis	7	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
(*d*) Maxillary antritis	13	...	...	...	...	...	...	...	...	...	2	...	...	2	4	...	...	2	2	...	...
(*e*) Malignant tumours	3	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(*f*) Various	2	...	...	...	...	...	...	...	...	..	1	...	...	...	...	...	...	...	1	...	...
34. Diseases of larynx—																					
(*a*) Laryngitis	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	2	...	...
(*b*) Benign tumours	3	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	..	...
(*c*) Carcinoma	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Various	7	2	...	...	...	3	...	...	...	...	1	...	...	1	...	...	...	..	...	...	...
35. Bronchitis	54	4	3	1	...	2	...	...	...	2	4	...	...	7	2	...	...	13	5	...	...
36. Broncho-pneumonia	49	13	14	7	9	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37. Pneumonia	90	8	4	...	...	11	9	1	...	15	8	...	...	10	2	2	...	7	2	1	...
38. Bronchiectasis	10	1	...	1	...	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...
39. Pulmonary tuberculosis	93	...	...	1	...	...	...	...	1	12	10	1	...	13	9	...	1	16	10	2	1
40. Pleurisy	39	...	...	...	...	3	2	...	...	8	3	1	...	3	3	...	...	8	2	...	...
41. Empyema	31	5	1	2	1	2	...	...	...	4	1	...	...	1	...	...	...	7	...	...	...
42. Pneumothorax	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...
43. Growth of lung or mediastinum	10	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...
44. Respiratory diseases, various—																					
(*a*) Abscess of lung	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
(*b*) Asthma	6	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	2	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	...	1	...	3	1	1	...	1	...	...	...	9	2	2	1	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	4	...	...	
1	2	...	...	1	1	...	...	1	...	...	...	57	64	...	...	
...	1	..	..	...	...	...	...	...	...	...	...	4	8	...	...	
...	...	...	...	...	1	...	...	1	1	...	...	7	8	...	...	
2	2	...	...	...	...	...	..	...	...	...	...	3	10	...	...	
2	...	...	...	1	2	...	..	2	1	...	..	17	8	..	...	
1	2	...	...	2	...	...	..	..	...	...	..	3	4	.	...	
...	1	...	...	...	...	...	...	...	...	...	...	4	9	...	...	
1	...	...	...	...	...	...	...	...	1	...	...	1	2	...	...	
...	...	.	...	...	...	...	...	...	...	...	...	...	2	...	...	
1	1	...	...	...	...	...	...	...	...	...	...	5	3	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	1	2	...	...	
...	1	...	...	5	...	...	...	3	...	...	...	8	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	6	1	...	...	
6	3	...	...	1	...	...	...	...	...	1	...	35	17	2	...	102
...	...	...	...	...	...	...	...	...	...	...	...	16	17	7	9	4
1	1	2	..	2	1	...	1	1	...	1	..	55	27	7	1	39, 41, 169 (*e*), 39
1	1	...	...	...	1	1	..	1	...	...	...	3	3	4	...	1 (*d*)
6	5	...	...	2	1	...	...	...	1	1	...	49	36	5	3	3 (*c*), 37, 53, 96, 40, 88, 48, 37, 96 (*a*). 183 (*a*), 41, 81 126 ,104
4	...	...	...	1	.	...	..	1	..	...	...	28	10	1	...	39, 178
5	...	1	...	...	...	1	...	...	...	...	...	24	2	4	1	37, 183 (*b*), 53, 39 79
2	...	...	...	...	...	...	...	...	...	...	...	3	...	2	...	67 (*a*), 53
1	...	2	2	...	...	1	1	...	1	1	...	2	1	4	3	
1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	
...	...	...	...	...	1	...	...	...	...	...	...	...	6	...	...	

TABLE I—

DISEASE.	Age. Total.	0— Discha. M.	0— Discha. F.	0— Died. M.	0— Died. F.	5— Discha. M.	5— Discha. F	5— Died. M.	5— Died. F.	10— Discha. M.	10— Discha. F.	10— Died. M.	10— Died. F.	20— Discha. M.	20— Discha. F.	20— Died. M.	20— Died. F.	30— Discha. M.	30— Discha. F.	30— Died. M.	30— Died. F.
DISEASES OF RESPIRATORY SYSTEM—*continued.*																					
44. Respiratory diseases, various—*continued.*																					
(*c*) Hydatid of lung	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*d*) Unclassified	7	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	1	...
DISEASES OF CIRCULATORY SYSTEM.																					
45. Aneurysm	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
46. Aortic disease	11	...	...	...	...	...	...	...	...	2	...	...	...	1	1	...	...	1	1	1	...
47. Arterio-sclerosis	5	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
48. Malignant endocarditis	13	...	...	1	...	...	...	...	...	...	...	...	2	...	...	1	2	...	...	3	1
49. Gangrene	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50. Mitral disease	54	...	...	...	...	...	3	...	1	5	9	1	...	3	7	...	1	4	8	...	1
51. Mitral and aortic disease	12	...	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...	1	...	1	...
52. Myocarditis	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53. Pericarditis	15	...	...	...	2	3	1	...	1	1	2	2	1	...	...	...	...	...	...	1	...
54. Varicocele	88	...	...	...	...	...	...	...	...	34	...	...	...	48	...	...	...	4	...	...	...
55. Varicose veins	148	...	...	...	...	...	...	...	...	13	2	...	...	31	29	...	...	26	20	...	...
56. Thrombosis	11	...	...	...	...	...	...	...	...	1	3	...	...	...	1	...	...	2	1	...	...
57. Congenital heart disease	4	2	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
58. Various—																					
(*a*) Tachycardia	9	...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	2	1	...	...
(*b*) Raynaud's disease	4	1	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	1	...	...	...
(*c*) Ruptured aortic valve	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Polycythæmia	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*e*) Unclassified	12	...	...	...	...	...	1	...	...	1	...	...	...	6	...	...	...	3	...	...	...
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUES.																					
59. Cysts (skin and subcutaneous)—																					
(*a*) Dermoid cysts	2	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...
(*b*) Sebaceous cysts	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
(*c*) Various	2	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
60. Tumours (skin and subcutaneous)—																					
(*a*) Carcinoma	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*b*) Sarcoma	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Rodent ulcer	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	3	1	2	1	
6	...	1	...	8	1	1	...	...	...	...	...	16	1	2	...	
1	...	...	1	...	2	...	...	...	...	...	...	5	4	1	1	53
1	...	...	...	2	...	...	...	1	...	...	...	5	...	...	...	
1	...	...	1	...	...	...	1	...	...	...	...	1	...	5	7	39, 88 (*a*), 53, 179
...	...	...	...	2	3	...	1	...	3	...	1	2	6	...	2	
3	5	...	...	1	1	...	1	...	...	...	...	16	33	1	4	50, 88 (*a*), 170, 175, 122
...	...	...	1	...	1	1	...	1	...	...	1	2	6	2	2	6, 37, 67 (*a*)
2	...	...	...	2	2	...	...	2	...	...	...	6	2	...	...	
...	...	...	...	...	..	1	...	...	...	...	...	4	3	4	4	37, 41, 42, 48, 50, 46, 127
2	...	...	...	...	...	...	...	...	...	...	...	88	...	...	...	55
13	8	...	...	4	1	1	...	...	...	...	...	87	60	1	...	54
2	...	...	...	...	1	...	...	...	...	...	...	5	6	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	10
...	1	...	...	...	...	...	...	1	...	...	...	7	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	
...	..	...	..	1	...	...	...	...	...	...	...	1	.	...	...	
...	...	...	..	...	...	...	...	...	...	...	...	1	...	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	10	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	...	...	...	1	...	...	...	...	..	...	2	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
...	...	...	...	1	...	...	...	1	...	1	...	3	...	1	...	
...	...	...	...	2	...	...	...	1	1	...	...	3	1	...	...	
...	...	...	...	2	...	...	...	1	...	...	...	3	...	...	...	

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUES —*continued.*																					
60. Tumours (skin and subcutaneous)—*contd.*																					
(*d*) Endothelioma	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
(*e*) Papilloma	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
(*f*) Lipoma	20	...	1	...	...	...	...	...	...	1	1	...	...	1	1	...	...	2	3	...	...
(*g*) Fibroma	6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	1	...	...
(*h*) Angioma	9	2	1	...	...	1	1	...	...	1	...	...	...	1	...	...	...	...	...	...	...
(*i*) Lymphangioma	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*j*) Rhinophyma	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61. Ulcers—																					
(*a*) Chronic ulcer	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(*b*) Varicose ulcer	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*c*) Gummatous ulcer	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*d*) Tuberculous ulcer	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(*e*) Bazin's disease	2	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...
62. Skin and subcutaneous (various)—																					
(*a*) Tuberculosis	6	1	1	...	...	...	...	...	...	1	1	...	...	...	1	...	...	...	1	...	...
(*b*) Ingrowing toe-nails	6	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	1	...	...
(*c*) Eczema	13	...	1	...	...	1	...	...	...	...	...	...	...	3	...	...	...	1	...	...	...
(*d*) Various	27	...	...	...	...	1	1	...	...	3	2	...	...	7	4	...	...	5	...	...	...
DISEASES OF THE DIGESTIVE SYSTEM.																					
63. Diseases of mouth and pharynx—																					
(*a*) Inflammatory conditions	8	...	...	...	...	...	1	...	...	1	...	...	...	2	1	...	...	...	...	...	...
(*b*) Simple tumours	11	...	...	...	...	1	...	...	...	1	1	...	...	1	...	...	...	2	2	...	...
(*c*) Malignant tumours—																					
(i) Mouth	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(ii) Pharynx	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Various	23	...	...	...	...	...	...	...	...	2	2	...	...	3	3	...	...	4	3	...	...
64. Tonsils and adenoids—																					
(*a*) Enlarged tonsils and adenoids	59	3	3	...	...	7	7	...	...	10	9	...	...	5	11	...	...	3	...	...	...
(*b*) Tonsillitis	25	6	...	...	...	3	1	...	...	1	...	...	...	6	3	...	...	1	2	...	...
(*c*) Tumours of tonsil	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
65. Tongue and lips—																					
(*a*) Carcinoma of tongue	20	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	...	...	...	...	...	...	...	1	1	...	...	3	1	...	...	
...	...	...	...	1	...	...	...	...	2	...	...	2	2	...	...	
1	4	...	...	3	2	...	...	...	...	...	...	8	12	...	...	
..	2	...	...	...	...	...	...	...	...	...	...	3	3	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	7	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	...	2	..	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
1	...	...	...	...	1	...	...	...	...	...	.	1	2	...	...	
..	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	4	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	4	2	...	...	
1	2	...	...	...	1	...	...	2	1	..	..	8	5	...	...	
3	1	...	...	...	...	...	...	...	...	...	...	19	8	...	...	
1	2	...	...	...	...	...	...	...	...	...	...	4	4	...	...	
...	...	...	...	1	1	...	...	1	...	...	...	7	4	...	...	
1	...	...	...	8	1	2	...	4	2	...	...	13	3	2	...	
1	...	...	...	2	...	1	...	1	...	...	...	4	...	1	..	
1	1	...	...	2	2	...	...	...	...	...	...	12	11	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	29	30	...	...	
...	1	...	...	...	...	...	...	...	...	1	...	17	7	1	...	
..	...	...	...	1	...	...	...	1	...	...	...	3	...	...	...	
3	...	...	...	9	...	...	...	2	2	2	...	16	2	2	...	

TABLE I—

DISEASE.	Total.	Age. 0— Dischd. M.	0— Dischd. F.	0— Died. M.	0— Died. F.	5— Dischd. M.	5— Dischd. F.	5— Died. M.	5— Died. F.	10— Dischd. M.	10— Dischd. F.	10— Died. M.	10— Died. F.	20— Dischd. M.	20— Dischd. F.	20— Died. M.	20— Died. F.	30— Dischd. M.	30— Dischd. F.	30— Died. M.	30— Died. F.
DISEASES OF THE DIGESTIVE SYSTEM—*continued.*																					
65. Tongue and lips—*cont.*																					
(*b*) Simple tumours of tongue	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*c*) Tongue, various	9	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	2	1	...	...
(*d*) Carcinoma of lips	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*e*) Simple tumours of lips	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*f*) Lips, various	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66. Œsophagus—																					
(*a*) Carcinoma	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*b*) Simple stricture	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
67. Stomach—																					
(*a*) Ulcer	37	...	...	...	...	...	...	...	...	...	1	...	..	1	7	...	...	3	14	...	...
(*b*) Perforated ulcer	17	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	3	3	1	1
(*c*) Carcinoma	48	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2	2	...
(*d*) Dilatation	2	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Various	30	...	...	...	..	...	...	...	...	..	...	...	...	...	2	...	...	4	4	...	...
68. Duodenum—																					
(*a*) Ulcer	32	...	...	...	...	...	...	...	.	...	...	..	..	1	...	...	...	13	1	...	...
(*b*) Perforated ulcer	17	...	...	...	...	...	...	...	...	...	...	...	...	3	...	2	...	2	...	2	...
69. Hæmatemesis	4	...	...	...	...	...	...	...	..	...	1	...	...	...	...	...	...	1	...	...	...
70. Intestinal, various—																					
(*a*) Simple	19	...	...	1	...	1	...	...	...	2	...	...	...	2	4	...	...	1	...	...	...
(*b*) Malignant	30	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	...	...
71. Appendicitis, quiescent	188	...	...	...	...	4	3	...	...	21	31	...	...	24	39	...	1	11	24	...	1
72. Appendix abscess	52	...	...	...	...	...	...	...	...	10	10	2	...	5	6	1	...	6	1	1	...
73. Acute appendicitis	258	1	...	...	...	12	12	2	...	56	31	6	5	45	34	...	...	22	13	1	1
74. Colitis	18	...	...	...	1	...	...	...	...	...	...	...	...	2	...	...	...	3	6	...	...
75. Intestinal obstruction—																					
(*a*) Simple	22	...	...	...	...	...	...	...	...	1	...	...	1	...	...	2	...	1	1	2	2
(*b*) Malignant	33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
(*c*) Intussusception	23	9	6	5	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
76. Rectum and anus—																					
(*a*) Carcinoma	47	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	1	1	1	...
(*b*) Simple stricture	3	...	...	...	...	...	...	...	.	1	...	...	...	...	...	...	...	...	1	...	...
(*c*) Prolapse	4	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...
(*d*) Polypi	4	...	...	...	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...
(*e*) Epithelioma of anus	2	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*f*) Rectal hæmorrhage	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
(*g*) Various	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..
77. Hæmorrhoids	125	...	...	...	...	...	...	...	...	1	...	...	...	12	21	...	...	27	13	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...		
...	...	...	1	1	...	...	2	...	...	...	5	4	...	...		
...	...	...	5	...	...	...	5	...	...	...	11	...	...	...		
1	...	...	...	...	...	...	...	...	...	...	1	1	...	...		
...	...	...	1	...	...	...	1	...	...	...	2	...	...	...		
1	2	...	4	1	5	...	7	2	2	...	14	4	9	...		
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...		
3	1	...	1	3	...	2	...	...	...	...	6	28	1	2	42, 51	
1	...	1	2	...	1	...	...	...	1	1	6	4	4	3		
4	2	1	7	2	4	1	7	4	2	1	23	12	10	3		
...	...	...	...	...	...	...	...	...	...	...	2	...	...	...		
6	...	...	2	2	...	...	.	3	...	...	13	17	...	...		
...	2	1	3	...	...	...	...	...	2	...	26	1	4	1		
...	3	1	...	...	...	2	1	...	...	...	7	...	7	3		
...	...	...	...	..	...	...	2	...	...	...	3	1	...	...	1	(*c*)
2	...	1	...	2	...	...	...	1	...	...	8	9	1	1		
...	...	...	6	5	3	...	4	6	...	2	11	14	3	2		
14	...	..	5	1	...	...	...	2	...	...	72	114	...	2		
1	1	...	...	3	...	...	1	1	...	...	25	22	5	...		
4	1	1	1	1	2	1	...	...	...	...	143	95	12	8		
1	...	1	1	1	...	...	1	1	...	...	7	9	...	2		
3	...	1	2	1	1	2	...	...	1	1	4	6	5	7		
...	4	1	2	1	...	2	2	10	3	5	7	15	3	8		
1	...	...	...	...	...	...	...	...	...	...	9	8	5	1	84	
1	...	1	3	11	2	...	10	7	2	2	17	21	6	3		
...	...	...	...	...	...	...	...	...	...	...	2	1	...	...		
...	...	...	...	1	...	...	...	...	...	...	1	3	...	...		
...	...	...	1	...	...	...	...	...	...	...	3	1	...	...		
...	...	...	...	...	...	...	1	1	...	...	1	1	...	...		
...	...	1	...	...	...	...	...	...	...	...	2	...	...	1		
...	1	...	...	...	...	...	...	...	...	...	1	...	1	...		
7	...	...	12	8	...	...	...	1	...	...	75	50	...	...		

TABLE I—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DISEASES OF THE DIGESTIVE SYSTEM—*continued.*																					
78. Fistula and fissure *in ano*—																					
(*a*) Fissure	23	...	...	...	...	...	...	...	...	...	...	...	...	5	5	...	...	3	4	...	...
(*b*) Fistula	32	...	...	...	...	...	...	...	...	3	...	...	...	6	1	...	...	5	2	...	...
79. Abdominal pain	97	1	...	...	...	4	2	...	...	11	12	...	...	10	16	...	...	5	12	...	...
80. Constipation	20	3	1	...	...	...	...	...	...	2	3	...	...	...	2	...	...	1	5	...	...
81. Diarrhœa and dysentery	13	...	1	...	...	...	...	...	...	1	...	...	...	6	...	...	...	3	..	...	...
82. Dyspepsia	44	...	...	...	...	...	...	...	...	...	1	...	...	8	4	...	...	6	6	...	...
83. Dysphagia	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84. Enteritis	54	8	6	15	7	6	2	..	...	2	1	...	...	2	4	...	...	...	1	...	...
85. Abdominal, various—																					
(*a*) Visceroptosis	10	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	2	...	...
(*b*) Abdominal carcinomatosis	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	..	...
(*c*) Abdominal sarcomatosis	7	...	...	2	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...
(*d*) Splenomegaly	4	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
(*e*) Various	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
86. Foreign bodies in the intestinal tract	5	...	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...
DISEASES OF THE DIGESTIVE GLANDS.																					
87. Salivary glands—																					
(*a*) Parotid tumour	9	...	...	...	...	...	...	1	...	...	2	...	...	...	...	...	...	2	1	...	...
(*b*) Various	6	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1	1	...	...
88. Cirrhosis of liver—																					
(*a*) Alcoholic	21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...
(*b*) Syphilitic	5	...	...	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...
(*c*) Hanot's cirrhosis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
89. Cholelithiasis	52	...	...	...	...	...	...	...	...	...	1	...	...	1	5	...	...	5	6	...	...
90. Cholecystitis	15	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	4	...	...
91. Jaundice	6	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...	...	...	...	...
92. Pancreas	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1	1	...
93. Digestive, various—																					
(*a*) Carcinoma of liver	3	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...
(*b*) Liver abscess	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
(*c*) Gummatous liver	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*d*) Carcinoma of gall-bladder	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Acute yellow atrophy	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
(*f*) Various	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
2	3	...	...	...	1	...	...	...	...	...	...	10	13	...	...	
3	5	...	...	3	...	...	...	2	...	...	...	24	8	...	...	
6	8	1	...	3	2	...	...	...	4	...	...	40	56	1	...	41, 16
...	1	...	...	...	...	...	...	...	2	...	...	6	14	...	...	
...	1	...	...	...	...	...	...	...	1	...	...	10	3	...	...	39
7	3	...	...	7	...	...	...	2	...	..	...	30	14	...	...	
...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	18	14	15	7	75 (*c*)
...	4	...	...	...	...	...	...	...	1	...	...	2	8	...	...	
1	1	...	...	1	...	...	...	...	2	1	1	4	3	1	1	
...	...	...	...	...	1	...	1	...	...	...	...	1	2	2	2	
...	..	...	...	1	...	...	...	...	1	...	...	3	1	...	...	
...	2	...	...	...	1	...	..	...	...	...	...	1	3	...	...	
1	...	..	...	...	...	...	...	...	...	...	...	3	2	...	...	
...	2	...	...	...	1	...	...	...	...	...	...	2	6	1	...	
...	...	...	...	1	...	...	...	...	1	...	...	3	3	...	...	
1	3	3	...	4	3	1	...	...	3	...	...	6	10	5	...	17 (*a*), 39, 48, 50
...	...	...	...	...	...	...	...	...	...	...	...	...	3	2	...	
...	...	...	...	...	...	...	...	...	...	.	...	1	...	...	...	
2	8	1	...	1	11	2	2	2	3	...	1	11	34	3	4	
...	2	...	...	1	3	...	...	...	1	1	...	1	12	1	1	
1	...	...	...	...	...	...	...	..	...	...	...	2	4	...	...	
...	...	1	...	4	2	1	...	4	1	1	...	10	2	4	2	
...	...	1	...	...	1	...	..	1	...	...	...	1	1	1	..	
...	...	...	...	...	...	1	...	...	...	...	...	2	...	1	...	
1	...	1	...	...	...	...	..	...	...	...	...	2	...	1	...	
...	.	1	...	...	...	...	...	...	...	...	...	...	...	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	
..	...	...	...	...	...	...	...	1	2	...	...	1	2	...	...	

TABLE I.—

DISEASE.	Total.	Age 0— Dischd. M.	Dischd. F.	Died. M.	Died. F.	5— Dischd. M.	Dischd. F.	Died. M.	Died. F.	10— Dischd. M.	Dischd. F.	Died. M.	Died. F.	20— Dischd. M.	Dischd. F.	Died. M.	Died. F.	35— Dischd. M.	Dischd. F.	M.
DISEASES OF THE PERITONEUM.																				
91. Ascites	2																	1		
95. Tuberculous peritonitis	31	6	3			3	3			7	5		1		2				1	
96. Peritonitis, various—																				
(*a*) General suppurative peritonitis of unknown origin	9					1	2	1	1		2									
(*b*) Carcinoma of peritoneum	1																			
(*c*) Peritoneal adhesions	4									1					2					
(*d*) Cæcal band	1																		1	
97. HERNIA—																				
(*a*) Inguinal, reducible	692	60	5			30	17			97	17			172	36			119	17	
(*b*) ,, irreducible	12													1				2		
(*c*) ,, strangulated	32	1								2				4				3		1
(*d*) ,, recurrent	21					1				3				5	1			6	1	
(*e*) Femoral, reducible	40					1				2	1			1	8			2	15	
(*f*) ,, irreducible	13														3			1	1	
(*g*) ,, strangulated	28													1	1				3	
(*h*) ,, recurrent	0																			
(*i*) Umbilical and ventral, reducible and irreducible	46	1	2				1			2	1			1	3			4	4	
(*j*) Umbilical and ventral, strangulated	6																			
(*k*) Umbilical and ventral, recurrent	2														1					
(*l*) Various	2										1			1						
DISEASES OF THE LYMPHATIC SYSTEM.																				
98. Adenitis—																				
(*a*) Simple	27		1			1	1			3	3			5	4			3		
(*b*) Tuberculous	129	7	6			10	7			26	23			9	23	1		4	4	
99. Glands, malignant	16																			
100. Lymphatic, various	1									1										
DISEASES OF THE DUCTLESS GLANDS.																				
101. Addison's disease	3													1	1					
102. Graves' disease	26										8			2	7		1		4	
103. Thyroid, various	33									1	3		1	1	8				7	
104. Various	10			1															1	

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	16	14	...	1	
...	...	...	1	...	...	1	...	...	...	...	...	1	4	2	2	37, 39
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	
...	1	...	...	...	...	...	...	...	...	...	...	1	3	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
75	10	1	...	26	2	...	...	8	...	...	...	587	104	1	...	
4	...	...	...	2	...	...	...	3	...	...	...	12	...	...	...	
3	...	2	...	2	...	2	...	6	1	4	1	21	1	9	1	
4	...	..	..	...	...	...	...	...	...	...	...	19	2	...	...	
2	5	...	...	1	1	...	...	1	...	...	...	10	30	...	...	
...	3	...	...	1	...	...	...	1	3	...	..	3	10	..	...	
1	5	...	1	1	6	...	...	1	6	...	2	4	21	...	3	
...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	
5	10	1	...	3	5	...	...	...	2	...	...	16	28	1	1	
...	1	...	2	...	2	...	...	...	...	...	1	...	3	..	3	
1		...	...	...	...	...	...	..	.	...	...	1	1	.	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	..	...	
1	4	...	...	...	1	...	.	...	...	...	...	13	14	...	...	
1	3	...	..	2	2	...		1	..	...	...	60	68	1	...	
4	...	...	...	2	2	...	...	7	1	...	...	13	3	...	...	
...	...	.	...	...	...	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	1	2	...	...	
..	3	...	...	...	1	...	...	...	...	...	...	2	23	...	1	35
1	9	...	...	...	1	...	...	...	1	...	...	3	29	...	1	
..	3	...	1	1	3	...	...	...	...	...	...	1	7	1	1	39

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DISEASES OF THE GENITAL SYSTEM.																					
105. Diseases of the breast—																					
(*a*) Simple	54	...	...	...	...	...	...	...	...	...	1	...	...	1	8	...	...	1	22	...	...
(*b*) Malignant	85	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	6	...	...
106. Testicle, undescended	19	...	...	...	...	4	...	...	...	11	...	...	...	4	...	...	...	...	...	...	...
107. Testicle and epididymis, various—																					
(*a*) Simple inflammatory	8	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...	...	1	...	...	...
(*b*) Tuberculous	14	...	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	9	...	...	...
(*c*) New growths	1	...	...	...	...	...	...	...	...	1	..	..	..	..	...	...	...	...	...	...	...
(*d*) Cysts of epididymis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
108. Processus and tunica vaginalis—																					
(*a*) Hydrocele of tunica vaginalis	59	3	...	...	...	...		...	...	11	...	...	...	17	...	...	...	13	...	...	...
(*b*) Hydrocele of cord	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
(*c*) Hæmatocele	2	...	...	...	...	...	.	...	...	...	...	..	...	1	...	...	...	...	...	...	...
109. Diseases of the ovary—																					
(*a*) Cysts, simple and multiple	41	...	...	...	...	...	...	..	...	...	...	...	...	...	7	...	...	...	13	...	...
(*b*) Teratomata	3	...	...	...	...	..	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...
(*c*) Other diseases, including malignant disease	10	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	3	...	...
(*d*) Broad ligament cysts	4	...	...	...	...	...	..	..	...	..	...	...	...	...	2	...	...	...	...	...	...
110. Diseases of the Fallopian tubes—																					
(*a*) Salpingitis	62	...	...	...	...	...	...	...	...	...	1	...	...	...	26	..	...	...	24	...	...
(*b*) Pyosalpinx and tubo-ovarian abscess	22	...	...	...	..	...	...	...	...	...	1	...	...	...	5	...	...	...	12	...	...
111. Ectopic gestation	20	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	12	...	...
112. Menstrual disorders—																					
(*a*) Menorrhagia and metrorrhagia	35	...	...	...	...	·	...	...	...	...	1	...	...	...	8	...	...	...	13	...	...
(*b*) Dysmenorrhœa	25	...	...	...	...	...	...	...	...	...	1	...	...	...	18	...	...	...	6	...	...
113. Pregnancy and its disorders—																					
(*a*) Abortion	25	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	8	...	...
(*b*) Normal pregnancy	414	...	...	...	...	...	...	...	.	..	27	...	...	...	265	...	2	...	102	...	...
(*c*) Toxæmias of pregnancy	22	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	2	...	7	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Dischd.		Died.		Dischd.		Died		Dischd.		Died.		Dischd		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
..	15	...	...	...	5	...	...	...	1	...	...	2	52	..	...	
...	26	...	...	1	31	...	...	...	16	...	4	1	80	...	4	
...	...	...	...	..	...	...	...	...	...	...	...	19	...	...	...	
1	...	...	...	1	...	...	...	...	...	...	...	8	...	...	...	
1	...	...	...	...	...	...	...	1	...	...	...	14	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	1	...	...	...	1	...	...	..	2	...	...	...	
10	...	...	...	3	...	...	...	2	...	...	...	59	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	
1	...	...	...	...	...	...	...	..	...	...	...	2	...	...	...	
...	12	...	1	...	7	...	...	...	1	...	...	..	40	...	1	
...	...	...	...	...	1	...	...	...	...	...	...	...	3	...	...	
...	2	...	1	...	1	...	1	...	...	...	...	...	8	...	2	
...	...	...	...	...	1	...	...	...	1	...	...	..	4	...	...	
...	7	...	2	...	2	..	...	...	...	...	...	...	60	...	2	
...	4	...	...	...	...	...	...	...	...	...	...	...	22	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	...	20	...	...	
...	13	...	...	...	...	...	...	...	...	...	...	...	35	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	25	...	...	
...	7	...	1	...	...	...	...	...	...	...	...	...	24	...	1	
...	18	...	...	...	...	...	...	...	...	...	...	...	412	...	2	
...	...	...	...	...	...	...	...	...	...	...	...	...	20	...	2	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DISEASES OF THE GENITAL SYSTEM—*continued.*																					
113. Pregnancy and its disorders—*continued.*																					
(*d*) Ante- and post-partum hæmorrhage	25	...	...	...	...	...	...	...	...	...	...	...	...	...	11	...	...	...	10	...	2
(*e*) Contracted pelvis	20	...	...	...	...	...	...	...	...	...	...	...	...	...	11	...	...	...	9	...	...
(*f*) Obstructed labour	12	...	...	...	...	...	...	...	...	..	1	...	...	...	8	...	...	...	3	...	...
(*g*) Pregnancy, various	23	...	...	...	...	...	...	...	...	...	1	...	...	...	12	...	...	...	7	...	1
(*h*) Sequelæ of pregnancy	13	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	2	...	4	...	2
114. Diseases of the body of the uterus—																					
(*a*) Endometritis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*b*) Fibromyomata uteri	68	...	...	...	...	...	...	...	...	...	...	..	...	..	2	...	...	...	23	...	...
(*c*) Polypi, fibroid and mucous	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...
(*d*) Malignant disease	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Various	1	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...
115. Diseases of the cervix—																					
(*a*) Carcinoma	38	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..	5	...	...
(*b*) Various	7	...	...	...	...	...	...	...	...	...	..	...	...	...	1	...	...	...	1	...	...
116. Pelvic inflammation—																					
(*a*) Cellulitis	3	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	...
(*b*) Peritonitis	15	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	6	...	...
117. Vagina and vulva—																					
(*a*) Epithelioma	4	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Diseases of Bartholin's gland	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*c*) Urethral caruncle	5	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(*d*) Vaginal, various	10	...	...	...	...	...	...	...	...	..	...	...	...	...	1	...	...	...	5	...	...
(*e*) Leucorrhœa	5	...	...	...	...	...	...	...	...	...	..	...	...	...	3	...	...	...	...	...	...
(*f*) Vulva, various	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
118. Ruptured perinæum	9	...	...	...	..	...	...	...	...	...	...	...	...	...	5	...	...	...	1	...	...
119. Prolapse and displacements—																					
(*a*) Prolapse of uterus	33	...	...	...	...	...	..	...	...	...	...	...	...	...	4	...	...	...	14	...	...
(*b*) Prolapse of vaginal walls	21	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	11	...	...
(*c*) Retroversion and retroflexion	7	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	5	...	...
120. Genital, various—	6	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	

TABLE I.—

DISEASE.	Total.	Age. 0— Dischd. M.	Dischd. F.	Died. M.	Died. F.	5— Dischd. M	Dischd. F.	Died. M.	Died. F.	10— Dischd. M.	Dischd. F.	Died. M.	Died. F.	20— Dischd. M.	Dischd. F.	Died. M.	Died. F.	30— Dischd. M.	Dischd. F.	Died. M.	Died. F
DISEASES OF THE URINARY SYSTEM.																					
121. Movable kidney	17	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	...	...	10	...	...
122. Renal calculus and colic	46	...	...	...	...	1	...	...	...	...	1	...	...	11	4	...	...	8	6	...	1
123. Hydronephrosis	7	...	1	...	...	...	...	...	...	..	...	...	...	1	1	..	...	...	1	1	..
124. Pyonephrosis	8	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	...	2	..
125. Kidney, and ureter, various—																					
(*a*) Pyelitis	11	...	...	...	...	1	...	...	...	...	2	...	...	...	5	...	...	...	2	...	..
(*b*) Tumour of kidney	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
(*c*) Tuberculosis of kidney	13	...	...	...	...	...	...	...	...	2	...	...	...	1	3	1	...	2	1	...	..
(*d*) Various	8	...	...	...	1	...	...	...	...	...	...	...	...	2	1	...	...	2	...	...	..
126. Acute nephritis	20	2	1	1	...	4	...	...	...	3	1	1	...	4	..	...	...	3	...	...	..
127. Chronic nephritis	29	...	...	...	...	...	...	...	...	1	...	...	...	3	1	...	...	5	1	1	1
128. Vesical calculus	9	...	...	...	...	2	...	...	...	1	...	...	...	...	...	...	..	...	2	...	..
129. Vesical, various—																					
(*a*) Carcinoma	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
(*b*) Papilloma	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	..
(*c*) Cystitis	20	...	...	...	...	...	...	...	...	1	...	...	...	3	1	...	...	6	3	...	..
(*d*) Various	24	...	...	...	...	1	1	...	...	...	2	...	...	2	5	...	...	2	1	...	..
130. Prostate—																					
(*a*) Simple enlargement	21	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
(*b*) Carcinoma	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	..
(*c*) Prostatic bar	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..
(*d*) Calculi	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	..
131. Urethra and external genitalia—																					
(*a*) Phimosis	22	1	...	...	...	3	...	...	...	6	...	...	...	7	...	...	...	4	...	...	..
(*b*) Urethral stenosis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	..
(*c*) Urethral fistula	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
132. Urethral stricture	55	...	...	...	...	...	...	...	...	...	...	...	.	3	...	...	...	8	...	2	..
133. Urinary, various—																					
(*a*) Pyuria	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..
(*b*) Bacilluria	7	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	1	...	...	..
(*c*) Albuminuria	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	..
DISEASES OF THE MUSCULAR SYSTEM.																					
134. Muscles—																					
(*a*) Tumours	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	..	...	...	...	...	..
(*b*) Various	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	..

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	2	...	...	...	...	...	...	...	...	...	...	1	16	...	...	
5	2	...	...	5	1	...	...	...	1	...	...	30	15	...	1	50
1	...	...	1	...	...	...	...	..	...	...	...	2	3	1	1	
1	1	...	...	...	...	...	1	...	...	...	...	2	3	2	1	
...	...	...	...	...	1	...	...	...	...	...	.	1	10	..	...	
1	...	...	...	...	1	...	...	...	1	..	...	1	3	...	...	
1	2	...	...	...	...	...	...	...	...	...	...	6	6	1	...	
1	...	...	...	...	1	...	...	...	...	..	...	5	2	...	1	
..	...	...	...	...	...	...	...	...	...	...	...	16	2	2	...	39
4	3	..	2	1	1	1	1	2	1	...	...	16	7	2	4	53
1	...	...	...	3	...	...	...	1	...	1	...	8	...	1	...	
1	...	...	...	1	1	1	...	2	...	2	...	4	1	3	...	
...	...	...	...	1	...	1	...	2	...	..	...	5	...	1	...	
1	1	...	...	1	...	...	1	1	1	...	...	13	6	...	1	
3	2	...	...	1	1	...	...	2	1	...	...	11	13	...	...	
...	...	...	...	1	..	2	...	19	...	6	...	20	...	8	...	
...	...	...	...	2	..	...	...	4	...	5	...	6	...	6	...	
...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	
...	...	...	...	1	...	...	...	1	...	...	...	2	...	...	...	
...	...	...	...	...	..	...	...	1	...	...	...	22	...	...	...	
1	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	...	...	...	...	1	..	...	..	2	...	...	...	
16	1	...	...	7	...	2	...	12	...	4	...	46	1	8	...	
...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	
1	...	...	...	...	2	...	...	...	...	...	...	3	4	...	...	169 (*e*)
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	..	...	1	...	..	1	...	...	...	2	1	...	..	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	

TABLE I.—

DISEASE.	Total.	Age. 0— Discha. M.	0— Discha. F.	0— Died. M.	0— Died. F.	5— Discha. M.	5— Discha. F.	5— Died. M.	5— Died. F.	10— Discha. M.	10— Discha. F.	10— Died. M.	10— Died. F.	20— Discha. M.	20— Discha. F.	20— Died. M.	20— Died. F.	30— Discha. M.	30— Discha. F.	30— Died. M.	30— Died. F.
DISEASES OF BURSÆ AND TENDONS.																					
135. (*a*) Chronic bursitis	28	...	...	...	...	2	...	...	...	1	5	...	...	1	8	...	...	3	2	...	...
(*b*) Acute bursitis	13	...	...	...	...	...	...	...	...	...	3	...	...	...	3	...	...	1	1	...	...
(*c*) Tuberculous teno-synovitis	2	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...
(*d*) Ganglion	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...
DISEASES OF THE OSSEOUS SYSTEM.																					
136. Periostitis	7	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...
137. Osteomyelitis	16	2	1	1	...	1	1	...	...	3	1	1	1	1	...	...	...	2	...	...	...
138. Osteitis	7	...	...	...	...	1	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...
139. Caries—																					
(*a*) Spinal	26	...	3	...	...	3	...	...	...	4	...	...	1	2	5	...	...	2	1	...	...
(*b*) Various	20	1	...	...	...	...	...	...	...	4	4	...	...	1	...	...	...	3	3	...	...
140. Necrosis	24	1	...	...	...	3	...	...	...	3	1	...	...	3	3	...	...	1	2	...	...
141. Tumours—																					
(*a*) Simple tumours	12	...	...	...	...	...	...	...	...	2	1	...	...	1	2	...	...	1	3	...	...
(*b*) Sarcoma	10	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	1	...
(*c*) Myeloid sarcoma	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*d*) Carcinoma	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
142. Bones, various	12	...	...	...	...	1	...	...	...	4	...	...	...	2	...	...	...	4	...	...	...
143. Affections of amputation stumps	11	...	...	...	...	1	...	...	...	1	1	...	...	6	...	...	...	1	...	...	...
DISEASES OF THE ARTICULATORY SYSTEM.																					
144. Shoulder—																					
(*a*) Tuberculous	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*b*) Ankylosis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
145. Elbow—																					
(*a*) Tuberculous	4	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
(*b*) Ankylosis	3	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
(*c*) Arthritis, various	4	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...
146. Wrist—																					
(*a*) Tuberculous	2	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(*b*) Arthritis, various	4	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...
(*c*) Various	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
147. Sacro-iliac joint	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
148. Hip—																					
(*a*) Tuberculous	16	2	...	...	...	7	1	...	...	1	3	...	1	...	...	...	...	...	...	...	...
(*b*) Arthritis, various	9	...	...	...	...	1	...	...	...	1	1	...	...	1	...	...	...	1	...	...	...
(*c*) Ankylosis	3	...	...	...	...	1	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
(*d*) Various	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1	4	...	...	...	1	...	...	...	...	...	...	8	20	...	...	
1	2	...	..	...	2	...	...	...	...	...	...	2	11	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	...	...	...	...	...	..	...	...	...	...	...	2	...	...	
1	...	1	...	1	1	...	...	...	...	...	...	4	2	1	...	
1	...	...	...	...	...	...	...	...	...	...	...	10	3	2	1	
...	1	...	...	...	..	...	..	2	...	...	...	4	3	...	...	
2	1	...	...	1	...	...	...	...	1	...	...	14	11	...	1	
1	...	...	...	2	..	...	...	1	...	...	...	13	7	...	...	
1	1	...	...	3	.	...	...	2	...	...	...	17	7	...	...	
2	...	...	...	...	...	...	...	...	...	...	...	6	6	...	...	
1	2	1	...	1	...	...	.	...	..	..	...	5	2	2	1	
...	..	...	...	...	...	.	...	...	...	...	...	1	...	...	...	
...	...	...	...	1	2	...	...	..	...	...	...	1	2	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	12	...	...	...	
...	1	...	...	...	...	...	...	...	..	...	...	9	2	...	...	
...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	
...	..	...	...	1	..	...	...	1	...	...	...	2	...	...	...	
1	1	...	...	1	...	...	...	...	...	...	...	3	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	...	
...	...	..	...	...	1	..	...	...	...	...	...	2	2	...	...	
...	...	...	..	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	
...	...	...	...	...	...	...	...	1	...	...	...	11	4	...	1	
...	1	...	...	...	...	..	...	...	3	...	...	4	4	...	1	
...	...	...	...	...	...	...	...	...	...	...	..	1	2	..	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	

TABLE I.—

DISEASE.	Age.	0—				5—				10—				20—				30—			
	Total.	Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DISEASES OF THE ARTICULATORY SYSTEM—*cont.*																					
149. Knee—																					
(*a*) Tuberculous	20	...	...	...	...	5	1	...	...	5	2	...	...	4	2	...	...	...	1	...	...
(*b*) Synovitis	8	...	...	...	...	...	...	...	...	...	1	...	...	4	...	...	...	1	...	...	...
(*c*) Arthritis, various	13	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	1	...	...
(*d*) Ankylosis	4	...	...	...	...	...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...
(*e*) Internal derangement	41	...	...	...	...	...	...	...	...	1	...	...	...	25	1	..	...	11	1	...	...
(*f*) Various	4	...	...	...	..	...	...	...	...	...	...	...	...	1	1	...	...	1	...	...	...
150. Ankle and tarsus—																					
(*a*) Tuberculous ankle	7	...	...	...	...	...	...	...	...	2	1	...	...	1	1	...	...	...	...	...	...
(*b*) Tuberculous tarsus	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Various	4	...	...	...	...	..	...	...	...	...	...	...	...	...	2	...	...	1	...	...	...
151. Joints, various	15	1	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	2	1	...	...
DEFORMITIES.																					
152. Talipes—																					
(*a*) Congenital	9	3	2	...	...	1	...	...	...	1	1	...	...	1	...	...	...	..	...	...	...
(*b*) Paralytic	10	...	...	...	...	...	...	...	...	1	8	...	...	1	...	...	...	...	...	...	...
153. Torticollis—																					
(*a*) Congenital	4	...	...	...	...	1	...	...	...	2	1	...	...	...	..	...	...	...	...	...	...
(*b*) Various	3	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
154. { Genu valgum	9	1	...	...	...	...	3	...	...	2	1	...	...	...	1	...	...	...	...	...	...
154. { Genu varum	0	...	...	..	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
155. Cicatricial contracture	10	...	...	...	...	...	...	...	...	1	3	...	...	2	...	...	...	3	...	...	...
156. Hammer-toe	17	...	...	...	...	...	...	...	...	3	5	...	...	3	4	...	...	2	...	...	...
157. (*a*) Pes planus	13	...	...	...	...	...	...	...	...	5	1	...	...	1	..	...	...	4	...	...	...
(*b*) Pes cavus	2	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
(*c*) Hallux valgus	7	...	...	...	...	...	...	...	...	1	1	...	...	...	1	...	...	1	1	...	...
(*d*) Hallux flexus	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
158. Deformities, various—																					
(*a*) Secondary to paralyses	8	1	...	...	...	1	1	...	...	1	4	...	...	...	..	...	...	...	...	...	...
(*b*) Resulting from rickets	3	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Coxa vara	5	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...
(*d*) Scoliosis	3	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...
(*e*) Various	4	...	...	...	...	...	...	...	...	1	3	...	...	...	...	...	...	...	...	...	...
MALFORMATIONS.																					
159. Hare lip and cleft palate	33	16	9	...	1	...	1	...	1	2	2	...	...	1	...	...	...	...	...	...	...
160. Malformations of head and neck—																					
(*a*) Meningocele	2	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Cervical ribs	11	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	3	...	...
(*c*) Various	6	1	...	...	...	1	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
												14	6			
2												7	1			
1	3			3			1					8	4		1	
					1							2	2			
1	1											38	3			
1												3	1			
	1				1							3	4			
													1			
						1						1	2	1		
2	1			2	1			2	1			10	5			
												6	3			
												2	8			
												3	1			
												1	2			
	1											3	6			
	1												6	4		
												8	9			
2												12	1			
												1	1			
	2											2	5			
													1			
												3	5			
												3				
												5				
												1	2			
												1	3			
												18	13		2	
														1	1	
1	4			1								2	9			
					1							4	2			

TABLE I.—

DISEASE.	Total.	Age. 0— Dischd. M.	Dischd. F.	Died. M.	Died. F.	5— Dischd. M.	Dischd. F.	Died. M.	Died. F.	10— Dischd. M.	Dischd. F.	Died. M.	Died. F.	20— Dischd. M.	Dischd. F.	Died. M.	Died. F.	30— Dischd M.	Dischd F.	Died. M.	Died. F.
MALFORMATIONS—*continued*																					
161. Malformations of the trunk—																					
(*a*) Imperforate anus	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Spina bifida	5	2	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...	...
(*c*) Hypospadias	3	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...
(*d*) Various	2	...	1	...	1	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...
162. Various malformations of the limbs—																					
(*a*) Congenital dislocation of hip	6	5	...	...	...	1	.	...	...	...	...	...	...	...	...	...	.	...	...	...	...
DISEASES OF THE AUDITORY SYSTEM.																					
163. Chronic otitis media with mastoiditis	74	1	...	.	...	6	6	...	...	12	6	...	...	16	8	...	...	6	2	...	...
164. Acute mastoiditis	75	6	9	...	...	15	11	...	...	11	7	...	4	4	1	...	..	1	3	...	...
165. Auditory, various—																					
(*a*) Acute otitis media	6	...	1	...	...	1	1	...	...	1	...	..	...	...	...	...	...	...	1	...	...
(*b*) Various	4	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	...
DISEASES OF THE NERVOUS SYSTEM.																					
166. Cerebral hæmorrhage	4	...	...	...	...	...	...	...	...	...	...	.	...	...	...	..	...	...	...	...	...
167. (*a*) Cerebral thrombosis	3	...	...	...	...	...	...	..	..	...	...	...	..	...	...	...	...	...	...	...	...
167. (*b*) Cerebral embolism	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
168. Cerebral and spinal syphilis	33	...	...	...	...	...	...	...	...	1	1	...	...	9	3	...	..	4	6	...	...
169. Cerebral, various—																					
(*a*) Mental diseases	2	...	...	...	...	..	...	...	...	...	...	...	..	...	1	...	...	...	...	...	...
(*b*) Headache	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*c*) Hydrocephalus	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Paralysis agitans	4	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	..	...	...	...
(*e*) Cerebral diplegia	2	1	...	...	...	...	...	...	...	1	...	...	..	...	...	...	...	...	...	...	...
(*f*) Various	5	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...	...
170. Chorea	20	...	...	...	...	3	2	...	...	5	8	...	...	..	2	...	...	...	...	...	...
171. Disseminated sclerosis	21	...	...	...	...	..	...	...	...	...	1	...	...	3	4	1	...	3	5	...	...
172. (*a*) Idiopathic epilepsy	17	1	1	...	..	1	1	..	...	2	...	...	...	5	...	...	...	4	...	...	...
(*b*) Jacksonian epilepsy	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Convulsions	3	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
173. Neurasthenia and hysteria	56	...	...	...	...	...	...	...	...	2	8	...	...	7	10	...	...	4	11	..	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
												2				
												2	1	1	1	
												3				
													1		1	
													6			
3	6			2								46	28			
				1	1				1			38	33		4	
	1											2	4			
												4				
			1				1			2				2	2	
				1				1			1	2			1	
				1								1				
3	2			3	1							20	13			
							1					1	1			
	1				1								3			
												1				
				2	1			1				3	1			
												2				37, 133 (*b*)
2												3	2			
												8	12			50
1	1			1	1							8	12	1		
1	1											14	3			
1												1				
1												1	1		1	
5	8								1			18	38			

TABLE I.—

DISEASE.	Total.	Age. 0— Discha. M.	0— Discha. F.	0— Died. M.	0— Died. F.	5— Discha. M.	5— Discha. F.	5— Died. M.	5— Died. F.	10— Discha. M.	10— Discha. F.	10— Died. M	10— Died. F.	20— Discha. M	20— Discha. F.	20— Died. M.	20— Died. F.	30— Discha. M.	30— Discha. F.	30— Died. M.	30— Died. F.
DISEASES OF THE NERVOUS SYSTEM—*continued.*																					
174. General paralysis	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...
175. Hemiplegia	4	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
176. Anterior poliomyelitis	10	1	1	1	...	...	1	1	1	...	3	...	...	...	...	1	...	...	...	...	...
177. Intra-cranial tumour	21	...	1	...	...	...	...	2	...	...	...	2	...	3	1	...	...	5	1	...	...
178. Tuberculous meningitis	17	...	...	6	3	...	...	2	2	...	...	2	...	...	...	1	...	...	...	...	...
179. Meningitis (non-tuberculous)	13	1	...	5	5	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...
180. Paraplegia	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
181. Neuralgia and sciatica	26	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	10	2	...	...
182. Facial paralysis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
183. Polyneuritis—																					
(*a*) Alcoholic	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
(*b*) Post-diphtheritic	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
184. Tabes	24	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	7	...	...	...
185. Various nervous diseases—																					
(*a*) Syringomyelia	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*b*) Myasthenia gravis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(*c*) Subacute combined degeneration	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
(*d*) Progressive muscular atrophy	2	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
(*e*) Amyotrophic lateral sclerosis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
(*f*) Spinal tumour	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*g*) Lesion of cauda equina	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
INJURIES.																					
186. Injuries of the head—																					
(*a*) Fractured vault of skull	10	...	...	...	2	...	...	...	...	1	...	...	...	2	...	1	...	1	...	2	...
(*b*) Fractured base of skull	9	...	...	...	...	...	...	...	...	1	...	2	...	1	...	...	...	...	...	...	...
(*c*) Fractured mandible	7	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	...	...	...
(*d*) Fractured nose	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*e*) Concussion	30	5	1	...	...	5	1	...	...	11	...	...	...	12	...	...	...	9	...	...	...
(*f*) Wounds of scalp and face	33	1	...	...	...	...	...	...	...	1	...	...	...	10	...	...	...	14	1	...	...
(*g*) Various	12	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...	...	5	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
8	...	...	...	1	...	...	...	...	...	...	...	12	...	...	...	
...	...	...	...	1	1	...	...	...	...	...	...	1	3	...	...	50
..	...	...	...	...	...	...	...	...	...	...	...	1	5	1	3	
2	1	1	...	1	...	1	...	...	...	...	...	11	4	6	...	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	12	5	25, 40
...	...	...	...	...	...	...	...	...	...	...	...	2	...	5	6	48, 10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	3	...	...	...	3	..	...	2	2	...	...	15	11	.	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
2	2	...	...	1	...	...	...	...	...	...	...	4	3	...	...	39
...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	41
9	3	...	...	1	...	...	...	2	...	...	...	21	3	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
1	...	...	...	1	...	...	...	...	...	..	...	3	...	...	...	1 (*a*)
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	
...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	
...	...	...	...	1	...	...	...	...	...	...	...	5	..	3	2	
..	...	...	1	1	...	...	1	1	1	...	...	4	1	2	2	
2	...	...	...	...	...	...	...	2	...	...	...	7	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
3	1	...	...	...	1	...	...	1	...	...	...	46	4	...	...	
1	...	...	...	1	1	...	...	2	1	...	...	30	3	...	...	
1	...	...	...	...	...	1	...	...	...	...	...	11	...	1	...	

TABLE I.—

DISEASE.	Total.	Age. 0— Discha. M.	0— Discha. F.	0— Died. M.	0— Died. F.	5— Discha. M.	5— Discha. F.	5— Died. M.	5— Died. F.	10— Discha. M.	10— Discha. F.	10— Died. M.	10— Died. F.	20— Discha. M.	20— Discha. F.	20— Died. M.	20— Died. F.	30— hd. M.	30— hd. F.	30— Died. M.	30— Died. F.
INJURIES—*continued.*																					
187. Injuries of the neck	8	...	...	...	...	...	...	...	...	1	...	...	...	3	...	...	...	1	...	...	...
188. Injuries of the upper extremity—																					
(*a*) Fractured clavicle	5	...	1	...	...	...	..	...	...	1	...	..	...	1	...	...	...	1	...	...	...
(*b*) Fractured scapula	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...
(*c*) Fractured humerus	46	4	3	...	...	7	4	...	...	7	...	...	...	5	...	1	...	2	...	...	...
(*d*) Fractured radius and ulna	34	...	...	...	...	5	1	...	...	6	...	...	...	9	...	...	...	8	...	...	...
(*e*) Fractured carpals, metacarpals, and phalanges	13	...	...	...	...	...	...	...	...	...	...	...	..	4	1	...	...	6	...	...	...
(*f*) Injuries of the soft parts	108	..	...	...	1	...	...	...	...	3	1	...	...	60	1	...	...	33	...	1	...
189. Injuries of the thorax—																					
(*a*) Fractured ribs	11	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...
(*b*) Various	10	...	...	...	...	...	...	...	...	1	...	...	...	4	...	...	...	3	...	...	...
190. Injuries of the abdomen—																					
(*a*) Ruptured viscera	4	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...
(*b*) Wounds	5	...	...	...	...	...	...	...	...	1	...	...	...	3	..	...	...	1	...	...	...
(*c*) Contusions	8	1	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	2	...	...	...
191. Injuries of the genito-urinary system—																					
(*a*) Injuries of the kidney	4	.	...	..	...	...	...	...	...	2	...	...	...	1	...	.	...	...	1	..	...
(*b*) Injuries of the urethra	1	...	...	..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(*c*) Injuries of the testis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
192. Fractures of the pelvis	6	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	1	...	...	...
193. Injuries of the lower extremity—																					
(*a*) Fractured femur	38	5	2	...	...	3	1	...	...	6	1	...	...	1	...	1	...	3	3	...	...
(*b*) Fractured patella	26	...	...	...	...	...	...	.	...	1	...	...	...	2	2	...	...	5	1	...	...
(*c*) Fractured tibia and fibula—																					
(i) Simple	27	1	...	...	...	2	...	...	...	4	...	...	...	5	...	...	...	4	1	...	...
(ii) Compound	11	...	...	...	...	...	...	...	...	...	...	...	.	2	...	...	...	3	..	...	...
(*d*) Pott's fracture	25	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	...	...	...
(*e*) Fractured tibia	15	...	...	...	...	...	1	...	...	1	...	...	...	3	1	...	...	3	...	...	...
(*f*) Fractured fibula	8	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	2	...	...	...
(*g*) Fractured tarsals, metatarsals, and phalanges	9	...	...	...	...	...	...	...	...	1	...	...	...	5	...	...	...	2	...	...	...
(*h*) Injuries of the soft parts	97	...	...	...	...	2	1	...	...	4	...	...	...	41	2	...	...	34	2	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
..	...	1	...	1	...	...	...	1	...	...	...	7	...	1	...	
..	...	...	...	1	..	...	...	...	...	...	...	4	1	...	..	
..	...	...	..	...	...	...	...	1	...	...	...	3	...	...	...	
4	1	..	...	5	.	...	...	2	1	...	...	36	9	1	...	
4	...	...	...	1	...	...	...	...	...	...	...	33	1	...	...	
1	...	...	..	...	1	...	...	...	...	...	...	11	2	...	...	
4	1	...	...	2	...	...	...	1	...	...	...	103	3	1	1	
1	1	...	...	3	...	1	...	1	...	1	...	8	1	2	...	
1	...	...	...	..	...	...	...	...	1	...	...	9	1	...	...	
..	...	1	...	...	...	...	...	...	...	...	...	1	...	2	1	
..	...	..	...	...	...	...	...	...	.	...	...	5	...	...	...	
1	...	...	...	1	...	...	.	...	...	...	...	7	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	
..	.	...	...	...	...	..	...	...	...	...	..	1	...	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
..	...	1	...	...	...	...	...	...	1	...	...	3	1	2	...	
4	2	...	...	1	1	...	..	3	1	...	...	26	11	1	...	
5	2	...	...	3	1	...	...	3	1	...	...	19	7	...	...	
3	2	...	...	2	2	...	...	1	...	...	...	22	5	...	...	
1	2	...	...	1	...	...	2	...	...	...	.	7	2	...	2	
8	3	...	...	2	3	...	...	3	2	..	...	17	8	...	...	
3	...	1	...	...	1	...	...	...	1	...	...	10	4	1	...	
1	...	...	...	...	...	...	...	1	...	...	...	8	...	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	
7	2	...	...	1	...	...	...	1	...	...	...	90	7	...	...	

TABLE I.—

DISEASE.	Total.	Age. 0— Disch'd. M.	0— Disch'd. F.	0— Died. M.	0— Died. F.	5— Disch'd. M.	5— Disch'd. F.	5— Died. M.	5— Died. F.	10— Disch'd. M.	10— Disch'd. F.	10— Died. M.	10— Died. F.	20— Disch'd. M.	20— Disch'd. F.	20— Died. M.	20— Died. F.	30— Disch'd. M.	30— Disch'd. F.	30— Died. M.	30— Died. F.
INJURIES—*continued.*																					
194. Injuries of the back—																					
(*a*) Fracture of the spine	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
(*b*) Wounds	10	...	...	...	...	...	...	...	...	2	...	...	...	5	...	...	...	3	..	...	...
(*c*) Contusions	9	1	...	...	...	1	...	...	...	...	...	...	...	4	...	...	...	3	...	...	...
195. Injuries of the joints—																					
(*a*) Shoulder	4	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	3	...	...	...
(*b*) Elbow	2	...	...	...	...	...	...	...	...	1	..	...	...	...	...	...	...	...	...	...	...
(*c*) Wrist	0	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*d*) Carpal and phalangeal joints	4	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
(*e*) Hip	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	..
(*f*) Knee	6	2	...	...	...	...	...	...	...	2	...	...	...	2	...	...	...	...	...	...	...
(*g*) Ankle	4	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	...
(*h*) Tarsal and phalangeal joints	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
196. Injuries of the nerves	9	1	...	.	...	...	...	...	...	1	3	...	...	1	...	...	...	1	...	..	..
197. Malunited and ununited fractures	23	...	1	...	...	2	...	...	...	2	2	...	...	2	...	...	...	3	1	...	...
198. Burns and scalds	25	2	4	...	4	...	...	...	1	1	...	...	...	2	2	...	...	5	1	...	1
199. POISONS—																					
(1) Oxalic acid	1	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
(2) Hydrochloric acid	2	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
(3) Laudanum	1	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(4) Carbolic acid	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
(5) Arsenic	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(6) Chlorine gas	1	..	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
(7) Veronal	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(8) Food poisoning	1	...	1	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
200. UNCLASSIFIED—																					
(*a*) Hæmorrhage or shock following operations in out-patient department	15	...	...	...	...	1	...	...	...	1	8	..	..	2	3	...	...	...	...	...	..
(*b*) Frost-bite	23	...	...	...	...	...	...	...	...	2	...	...	...	19	...	...	...	2	...	...	...
(*c*) Septic feet	17	...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	...	6	...	...	...
(*d*) Pain	14	...	...	...	...	...	...	...	...	...	2	...	...	...	2	...	...	3	...	..	..
(*e*) Various	22	1	1	...	...	1	2	...	...	...	1	...	...	7	...	...	...	6	...	...	...

continued.

40—				50—				60 and upwards.				Total result.				CROSS REFERENCES.
Discha.		Died.		Discha.		Died.		Discha.		Died.		Discha.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	...	...	...	1	...	...	...	...	...	...	...	2	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	10	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	
...	...	...	...	...	1	...	...	...	...	...	...	3	1	...	...	
1	...	..	...	...	...	...	...	...	...	...	...	2	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
1	2	...	...	...	1	...	...	...	...	...	...	1	3	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
...	...	..	...	...	...	...	...	...	...	...	...	6	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	
...	...	...	...	...	..	...	...	...	...	...	...	1	...	...	...	
...	...	...	...	1	...	...	...	1	...	...	...	6	3	...	.	
5	1	...	...	3	1	.	...	...	...	...	...	17	6	...	...	
...	1	...	...	..	...	...	...	...	...	...	1	10	8	...	7	
...	1	...	...	...	..	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	
...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	..	...	...	...	...	...	...	...	...	...	1	.	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	
...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	
...	...	...	.	...	...	...	...	...	...	...	...	...	1	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	4	11	...	...	
..	...	...	...	...	...	...	...	...	.	...	...	23	...	...	...	
1	...	...	...	...	...	...	...	...	...	...	...	17	...	...	..	
3	3	...	...	...	1	...	...	...	...	...	...	6	8	...	...	
1	...	...	...	2	...	...	..	...	...	...	...	18	4	...	...	

ABSTRACTS AND REMARKS.

[The numbers at the commencement of each paragraph correspond with those in Table I.]

GENERAL DISEASES.

1. (*a*) Pernicious Anæmia.

Nine cases, 4 of which were fatal.

Treatment.—Five had liquor arsenicalis, 2 had iron in addition, and 2 had neo-salvarsan.

Female, æt. 44. Two years' history of loss of weight and gastro-intestinal disturbance. No hæmorrhages. Marked pyorrhœa. Spleen just palpable. Skin yellowish. On admission red cells were 1,531,250, hæmoglobin 30 per cent., colour index 1·0; 5800 leucocytes, 2 normoblasts, and 4 megaloblasts. Hæmolysis occurred with 0·45 per cent. NaCl. Five weeks later, under treatment consisting of liquor arsenicalis and iron and quinine citrate, the red cells numbered 3,593,750, hæmoglobin 80 per cent., colour index 1·1, leucocytes 4840. The fragility of the red cells was not tested a second time.

Female, æt. 64. Complained of general malaise and giddiness for the last 6 months, and latterly some vomiting, a little blood being brought up once. Pyorrhœa was very marked. The legs were spastic; all jerks in both arms and legs were exaggerated, and the plantar response was extensor. Very definite loss of sense of position in toes, and impairment to light touch reached up to the thighs. Retention of urine. Spleen not felt. On admission red cells were 1,273,750, hæmoglobin 25 per cent., colour index 1·1; leucocytes 16,960, in normal proportions. Wassermann reaction positive. Treatment: Liquor arsenicalis and Donovan's solution. On discharge the spasticity was less, but there still remained signs of a subacute combined degeneration of the cord. Examination of the blood 3 months after the first count showed the red cells to be 3,725,000, hæmoglobin 35 per cent., colour index 0·5, leucocytes 9080.

Male, æt. 44. Admitted with a 3 years' history of numbness and tingling in the feet. Apart from some anæsthesia to light touch over the inner sides of the legs, there was no evidence of degeneration of the cord. Wassermann negative. Red cells were 2,387,500, hæmoglobin 60 per cent., colour index 1·3, leucocytes 1840. Treatment: Three doses of neo-salvarsan. Patient gained 19 lb. in weight, but there was no material change in the blood-count.

C. S—, *male, æt.* 52. Had been in poor health for 20 years, and had been worse for the last three months. Tongue sore; skin yellowish; spleen not felt;

pyorrhœa present. Red cells 1,664,500, hæmoglobin 35 per cent., colour index 1·1, leucocytes 2520. Two megaloblasts seen. No evidence of changes in the cords. Signs of pulmonary tuberculosis became evident, and patient was discharged without a second examination of the blood.

E. A—, *male, æt.* 28. Had a history of anæmia and dyspnœa on exertion for 3 months. Occasional epistaxis; gums bled easily. No intestinal symptoms. Several carious teeth. Spleen not felt. Skin pale, but no yellow tinge. A few small discrete glands were present in the neck and groins. Syphilis denied. Wassermann reaction not taken. No cord symptoms. Red cells 1,481,250, hæmoglobin 35 per cent., colour index 1·2, leucocytes 1620, small lymphocytes 68 per cent.; no nucleated red cells seen. The fragility of the red cells was slightly increased, *i. e.* hæmolysis with 0·4 per cent. NaCl. Several teeth were removed, and liquor arsenicalis with iron and ammonium citrate was given for 10 weeks. Red cells then numbered 5,375,000, hæmoglobin 100 per cent., colour index 0·9, leucocytes 3480, small lymphocytes 49 per cent.

Fatal cases.

Female, æt. 68. Three years ago had an attack of biliary colic and jaundice. For the last year the tongue had been sore and there had been general malaise, and during the last 6 weeks she had had vague pains in the limbs. No gastro-intestinal symptoms. Teeth absent. Skin yellowish. Spleen not felt. Knee-jerks increased. Ankle-jerks absent. Plantar response flexor. No sensory loss. Cammidge's reaction was positive, arousing the suspicion of carcinoma of the pancreas. There was marked intolerance to even small doses of liquor arsenicalis, and ·3 grm. of neo-salvarsan produced very severe diarrhœa. Latterly patient had very troublesome tingling and numbness in the limbs, and sensory loss became apparent in the legs. The spleen became palpable before death, which occurred 6 months after admission. Red cells on admission were 1,200,000, hæmoglobin 30 per cent., colour index 1·2; leucocytes 1640, of which 67 per cent. were small lymphocytes. Frequent examinations were made subsequently, but the red cells never exceeded 1,772,500, and the last count taken revealed 2 megaloblasts and 3 normoblasts. P.M.—The pancreas was not obviously diseased. The liver and kidneys gave the free iron reaction. The marrow in the femoral shafts was red. Brain had a walnut appearance from convolutional wasting, and the cord showed a patchy degeneration in the posterior columns. Stained films of the marrow showed it to be of a myeloblastic type; megaloblasts and normoblasts were present, but very few normal red cells were to be seen.

M. C—, *female, æt.* 69. Had had dyspepsia and increasing anæmia for the last 6 months. Extremely blanched. Pyorrhœa present. Liver and spleen just palpable. C.N.S. normal. Red cells 768,750, hæmoglobin 15 per cent., colour index 1·0, leucocytes 3920, 4 normoblasts and 3 megaloblasts. Died a few days after admission. P.M.—The only lesion of note was well-marked tabby-cat striation of the myocardium.

Male, æt. 24. Previous admission 1912 for pernicious anæmia. At that time he had on discharge a red-cell count of 3,275,000, hæmoglobin 70 per cent., colour index 1·1, leucocytes 2420. The spleen was just palpable, and the teeth were good. No changes detected in the C.N.S. Arsenic had been taken off and on since his discharge. Five months ago his legs became weak, and he

had numbness and tingling in his hands. On readmission he had definite signs of changes in the cord, plantar response extensor, all jerks rather brisk, some loss of sense of position. Red cells 3,187,500, hæmoglobin 60 per cent., colour index 0·9, leucocytes 5200. Colour good, and no arsenical pigmentation. In spite of arsenic, iron, and Lowenthal's lymphoid capsules the anæmia gradually increased and the changes in the cord became more marked. Just before death the ankle and knee-jerks were absent; there was very extensive sensory loss in the legs, incontinence of urine, and bed sores. The last count was red cells 752,250, hæmoglobin below 10 per cent, leucocytes 6080. The cerebro-spinal fluid gave a negative Wassermann reaction. P.M.—The spleen weighed 17 ounces. No free iron reaction in the viscera; fatty degeneration of cardiac muscles. Microscopically the spleen showed a profusion of megaloblasts and eosinophils and red-cell phagocytosis. The cord showed degenerative changes in the dorsal and lateral columns of the cervical region. In the dorsal and lumbar regions all the white matter, except the anterior and antero-lateral regions, was degenerated.

Male, æt. 41. Had malaria and dysentery in 1901. Last attack of malaria 6 years ago. Anæmic for the last 5 years. Suffered from increasing malaise for the last 9 months, with considerable loss of weight. Skin lemon-yellow colour. The liver and spleen were enlarged and hard, the latter reaching to the level of the umbilicus. Blood-culture sterile. No Wassermann reaction done. Red cells 1,112,500, hæmoglobin 10 per cent., colour index 0·5, leucocytes 2880, 62 per cent. of which were small lymphocytes. Fragility of red cells normal. No nucleated red cells seen. Two months later the red count was 734,375, hæmoglobin less than 10 per cent., leucocytes 2180, 15 normoblasts and 4 megaloblasts seen. There were never any signs suggesting any cord lesion. P.M.—No endocarditis. Extensive syphilitic scarring of the thoracic aorta. The marrow in the femoral shafts was bright pink. All the viscera gave a free iron reaction. Microscopically the marrow contained an abundance of normoblasts and megaloblasts. The spleen showed some fibrosis, eosinophilia, and numerous myelocytes and nucleated red cells.

(*b*) Splenic Anæmia.

Seven cases. Three cases had the fragility of the red cells tested, and in each of these it was found to be increased. Three were readmissions. In 2 cases, splenectomy was performed, and 1 of those re-admitted had had the spleen removed in 1912. Five cases had a white count of less than 3000. Two gave a positive and 3 a negative Wassermann reaction. The liver could be felt in every case, but in only 1 was there definite induration.

Cases of interest.—Male, æt. $2\frac{6}{12}$. Previous admission, 1913, for splenic anæmia. Skin slightly yellowish. Spleen much enlarged and liver palpable an inch below the costal margin, but not indurated. Red cells 5,162,500, hæmoglobin 40 per cent., colour index 0·4, leucocytes 6480, polymorphonuclear cells 43 per cent., small lymphocytes 46 per cent., no myelocytes, 13 normoblasts and 6 megaloblasts were seen. No bile in serum. Wassermann negative. Hæmolysis occurred with 0·5 per cent. NaCl. Just before splenectomy was performed, the red cells numbered 3,262,500, and the leucocytes 2720. The operation was easily performed, and no adhesions were present. Twelve days later red cells were 5,575,000, hæmoglobin 80 per cent., colour index 0·7, leucocytosis 13,720,

60 per cent. of which were polymorphonuclear cells; 6 microblasts and 8 normoblasts counted, but no megaloblasts were seen. Hæmolysis now with 0·52 per cent. NaCl. The yellowish tinge disappeared from the skin within 24 hours of the operation. Report on the spleen.—"No free iron present, some pigment scattered through the organ, sinus packed with cells. Large mononuclear cells very numerous. Eosinophils numerous. Phagocytosis very slight. Malpighian corpuscles few in number, but show active endothelial centres." Three months later, red cells 5,687,500, hæmoglobin 80 per cent,, colour index 0·7, leucocytes 12,320, 1 normoblast was the only nucleated red cell seen.

Male, æt. $2\frac{1}{12}$. Markedly anæmic. Palpable glands on both sides of the neck. Liver and spleen at the level of the umbilicus; the former had a smooth surface and a regular edge, and was not unduly large. Wassermann reaction positive. Red cells 2,756,250, hæmoglobin 35 per cent., colour index 0·6, leucocytes 9520; 3 myelocytes, 4 normoblasts, and 1 megaloblast counted. After treatment with mercurial inunction and liquor arsenicalis the general condition was improved, but there was no material alteration in the blood. The spleen was slightly smaller. Hæmolysis occurred with 0·5 per cent. NaCl. At times the skin was slightly icteric. Patient then had attacks of pain in the left hypochondrium, and it was decided to remove the spleen. Just before operation, red cells were 2,281,250, hæmoglobin 40 per cent., colour index 0·9, leucocytes 6600; 2 myelocytes, 2 normoblasts, and 2 megaloblasts were found. There was little shock from the operation and there were no adhesions. Three days later the skin was a better colour and hæmolysis occurred with 0·48 per cent. NaCl. Cultures of spleen sterile. Report: "No amyloid reaction present. No spirochætes seen. Very slight free iron reaction present, chiefly in the sinuses. Very large active Malpighian corpuscles. Sinuses large and distended with blood. Very slight phagocytosis." A fortnight after operation, red cells numbered 3,681,250, hæmoglobin 65 per cent., colour index 0·9, leucocytes 16,240, 53 per cent. being polymorphonuclear cells. Only 1 normoblast was seen.

Female, æt. 13. Splenectomy performed in January, 1912. Under observation ever since. Tonsils (which were very large) removed a year later. In February, 1914, red cells were 5,475,000, hæmoglobin 100 per cent., colour index 0·9, leucocytes 17,200. She remained in good health until March, 1914, but then had several bilious attacks with epigastric pain; no vomiting. Just before her last admission she vomited half a pint of blood; melæna was passed 2 and 5 days later. The liver was just palpable (as it always had been), but was not hard. She was discharged 3 weeks later, and after a further period of good health went away for a holiday. She had no more bleeding, and led an active life in the country for a few weeks until suddenly and without any premonitory symptoms she had a profuse hæmatemesis, which was repeated several times, death occurring within a few hours of the onset of the bleeding. No post-mortem examination was made.

(*d*) Secondary Anæmia.

Anæmia secondary to oral sepsis, 1; to bronchiectasis, 1; to parturition, 1; no obvious cause, 2. One case was possibly due to lymphadenoma, though examination of an excised gland showed no positive evidence of that disease or tuberculosis.

2. Debility.

Four cases were soldiers invalided home. The remaining 2 were nurses, 1 of whom was a doubtful case of pulmonary tuberculosis.

3. (*a*) Diabetes Mellitus.

Thirteen non-fatal and 6 fatal cases. In the non-fatal cases 3 had catarrh; 4 peripheral neuritis; 2 furunculosis; 1 eczema; 1 balanitis; 1 vulvitis; 1 gangrene of toes; 1 ischio-rectal abscess. One case gave a history of syphilis, and 1 appeared to be the result of a head injury. In 1 case there were undoubted signs of pulmonary tuberculosis. Six of the cases were of less than 8 months' duration. One had had glycosuria for 20 years. Eleven of the 13 cases had acetone on admission, and 7 were discharged with acetonuria.

In the fatal cases all had acetonuria; all died in coma. One had furunculosis; 3 peripheral neuritis; 1 cellulitis of arm; 1 balanitis; 1 carbuncle. All except 1 had a history of less than 2 years. All had a post-mortem examination. In 4 there was found to be some fibrosis of the pancreas, and in 1 there was a small hæmorrhage in the tail of the pancreas.

Complications.—Colloid formation in pars intermedia of the pituitary in 2; abscess in the anterior lobe of the pituitary in 1; chronic nephritis in 1; meningitis in 1; pyæmia in 1. The thyroid was normal in the 3 cases in which a microscopical examination was made. No active tubercle in lungs in any case.

Cases of interest.

Male, æt. 31. Nineteen months' history of polyuria and increased thirst. Three months before admission the legs became weak and sight began to fail. Furunculosis and balanitis recently. No retinitis; dimness of vision due to tobacco amblyopia. Knee- and ankle-jerks present. Died in coma. P.M.—Pancreas and thyroid normal. The pituitary showed colloid and alveolar formation in the pars intermedia; parathyroid, slight alveolar and colloid formation.

Male, æt. 26. Two years' history of increased thirst and polyuria, and loss of weight. Cellulitis of left arm. Right knee-jerk just obtained; left absent. A few crepitations below the left clavicle. Large carbuncle over sacrum. P.M.—Suppurative meningitis; multiple abscesses in both kidneys and lungs; small hæmorrhage in the tail of the pancreas.

Male, æt. 43. Discharged a few months ago. Diabetic history for the past 15 months. Left knee-jerk absent. P.M.—Pancreas showed fibrosis; chronic nephritis; abscess in anterior lobe of pituitary body; extensive suppurative meningitis.

(*c*) Diabetes Insipidus.

Two cases, one of them being fatal.

Male, æt. 21. A soldier who had had asthma since childhood. Eight years ago was told he had diabetes at Edinburgh Infirmary, where he was an in-patient for 3 months. Sent back from the front on account of asthma, and a week after admission suddenly developed polyuria, passing as much as 400 ounces of urine in 24 hours. A fortnight ago had a large hæmoptysis, but there were no physical signs of disease in the chest apart from some considerable degree of emphysema. The urine had a specific gravity of 1001, and did not contain any albumin or sugar. No Wassermann done. General condition on discharge was fairly good, but the polyuria persisted.

Male, æt. 34. A Portuguese. Contracted syphilis 17 years ago. Four months ago had part of one superior maxilla removed for caries, and at the same time a Wassermann reaction was positive. A month ago had one injection of salvarsan in Paris. For the past year had had persistent diarrhœa, lost 3 stone in weight, and for 2 months suffered from extreme thirst and polyuria. Appetite good. No increased salivation. Very emaciated. No sign of disease in the C.N.S. Urine had a specific gravity of 1000; no trace of sugar; diastase reaction positive; the daily amount passed varied between 80 and 320 ounces. Examination of the fæces showed total fat 44 per cent., neutral fat 28 per cent., fatty acids 16 per cent.; stercobilin present. Cammidge's reaction, test C, after fermentation, positive. Treatment: Mercurial inunctions and iodide by mouth. He improved in general health, the polyuria decreased, the diarrhœa lessened, and there was a gain of 9½ lb. in weight. Patient then had facial erysipelas, and 3 weeks later contracted diphtheria, following which he ran an intermittent temperature for a month and then died. P.M.—Both lungs studded with discrete tubercles. Caseating mediastinal glands. Marked cerebral œdema. The head of the pancreas was very large, and on section showed areas of focal necrosis with endothelial celled infiltration; ? gummata; ? tubercular.

4. Diphtheria.

Faucial: 2 non-fatal, 1 fatal. Laryngeal: 6 non-fatal, 3 fatal. Faucial and laryngeal: 3 non-fatal, 2 fatal. Tracheotomy was performed in 5 non-fatal and 4 fatal cases. Of 12 cultures taken, 9 were positive. Of the fatal cases, 2 had broncho-pneumonia, and the remaining 4 died of cardiac failure.

Female, æt. 15. Seven days' history of hoarseness and sore throat. No membrane visible. Looked very ill and complained of much pain in the throat. Cloud of albumin present. Two swabs were taken, but no diphtheria bacilli were seen. 8000 units of antitoxin given on admission. Eight days later nasal speech developed, followed by regurgitation of fluids. Knee-jerks present; accommodation normal. These symptoms were of a transient nature, and patient was discharged free from symptoms.

5. Enteric Fever.

Fourteen cases, 4 of which were fatal. Five out of one family were admitted. A grandmother had died at home a few days before the first child was admitted; her illness was an acute one and was accompanied by diarrhœa, but enteric was not suspected.

The first of the family admitted to hospital on April 3rd was a *girl, æt.* $2\frac{9}{12}$. She had a history of a week's malaise, and diarrhœa for the past 2 days; signs of consolidation of the right upper lobe.

On April 16th, a *sister, æt.* 6, was admitted with signs of bronchitis and a history of abdominal pain and malaise for the past 2 weeks. The abdomen was distended, but the spleen was not felt, and it was only at the autopsy, which took place on April 18th, that the true nature of the illness was discovered. Several typhoid ulcers were found in the lower ileum and cæcum, and two of the former had perforated. Widal's reaction was at once done on the sister, who up to that time had been regarded as an ordinary case of pneumonia, and was found to be positive.

The same evening a third *sister, æt. 9 months,* was admitted with a 2 weeks'

history of diarrhœa. The spleen was palpable and the abdomen full, but no spots were visible. Widal positive. Convalescence normal, the temperature falling about 10 days after admission. Stools always loose.

The first girl admitted died on April 24th. P.M.—No perforation; a few small typhoid ulcers in the ileum and extensive broncho-pneumonia. Pure culture of *B. typhosus* grown from a splenic culture.

On April 30th, a *brother*, *æt.* 8, was admitted with a history of headache for the previous 24 hours. The abdomen was rather full, spleen not palpable. Temperature 103° F. Pulse 148. Ox-bile culture positive 8th day. Three rose spots appeared on 9th day, and on 12th day the spleen was felt for the first time. Constipation throughout. Temperature normal 31st day. Normal convalescence.

On May 1st, the *father*, *æt.* 30, was taken in with a 3 days' history of severe headache, malaise, and diarrhœa following a purgative. Temperature 101° F. Pulse 80. Spleen palpable. Slight bronchitis. Ox-bile test negative 8th day. Widal positive 14th day. Rose spots appeared on 19th day. On 38th day the temperature suddenly fell to 95° F.; pulse and respiration not affected. Patient, who was quite conscious, had no pain, but as it was suspected that a perforation had occurred, a laparotomy was performed. No perforation found. Death occurred while the wound was being sewn up. P.M.—Numerous typhoid ulcers in various stages of healing, were found in the lower ileum. There was no peritonitis, and none of the ulcers had perforated. Death had apparently resulted from cardiac failure.

The infection in the first instance was attributed to some mussels.

In the remaining 9 cases, epistaxis occurred in 2, bronchitis in 5, rose spots in 8, headache in 6, vomiting in 2, abdominal pain in 1, constipation in 7, diarrhœa in 2. Widal positive in 7 cases and negative in 2 cases. Blood-culture positive in 2 cases in which a positive Widal reaction was also obtained; positive in 1 case where there was a negative Widal, negative in 1 case where the Widal was positive, and in 1 case both Widal and ox-bile test were negative, this being the fatal case.

Cases of interest.

Male, *æt.* 22. Previous attack in New York 8 months ago. Admitted 10th day with a history of headache, cough, and slight diarrhœa. Rose spots present on admission. Spleen palpable. Widal negative 9th day. Ox-bile culture positive 12th day. Incontinence of urine and delirium for the first week. Temperature normal 26th day. Constipation during the whole time he was in hospital. Normal convalescence.

Female, *æt.* 27. One of the Canadian sisters to the troops. Inoculated for typhoid at Quebec 5 weeks ago. Second dose 10 days later while on board ship. Admitted with a 7 days' history of headache, increasing lassitude, abdominal discomfort, and slight diarrhœa. No epistaxis. Spleen palpable. No rose spots. Bowels constipated after the first few days, during which the stools were rather loose. Ox-bile culture sterile. Widal positive 11th day. Temperature normal 22nd day. Normal convalescence.

Male, *æt.* 12. Admitted with a 4 days' history of pain in the right iliac fossa and severe headache. Temperature 104° F. Pulse 112. Three days later the abdominal symptoms had cleared up, but the temperature remained high. The

throat then became sore and a nasal discharge was seen. Morphologically diphtheria bacilli were grown from both throat and nasal swabs on 11th day, and on the 12th day some rose spots appeared on the abdomen, the spleen was palpable, and the abdomen became distended. Widal positive 12th day. Patient had two doses of 8000 units of diphtheria antitoxin. The throat and nose soon cleared up, and the enteric ran a normal course, temperature becoming normal on 31st day, and convalescence was uninterrupted.

Female, æt. 28. History of severe headache and pains in the legs for 6 days. Epistaxis at the onset. Just before admission she became delirious and attempted suicide by cutting her throat. She was taken into a surgical ward, and it was not till a few days later, when some rose spots appeared, that enteric was suspected. The spleen was palpable and the abdomen very much distended. Widal negative 16th day. Blood-culture sterile 20th day. Became comatose 19th day of illness, and had Cheyne-Stokes's respiration before she died on the 22nd day. P.M.—Four typhoid ulcers in the lower ileum. Hæmatoma of dura mater; origin of bleeding not found. Basal vessels healthy. There was no evidence of trauma, and the dura was not inflamed. Pure culture of typhoid bacillus grown from the heart's blood and surface of the brain.

6. Erysipelas.

Areas affected.—Face, 22; arm, 2; hand, 1; leg, 2. Readmitted with recurrence, 1; with facial abscess, 1; lupus, 1; pyæmia, 1.

7. Pyrexia.

One was probably a case of pneumonia, though there were no definite signs of consolidation in the lungs. One was thought to be a case of meningitis, following a head injury, but the cerebro-spinal fluid was normal.

Four cases on admission were supposed to be enteric. Spleen palpable in all. Widal negative in every case, and in 2 of these blood-cultures were sterile; 2 also had epistaxis, and 3 severe headache.

Case of interest.—Male, æt. 39. Dysentery in 1904, followed two months later by a liver abscess, which was drained and irrigated with quinine. Two years later another liver abscess was treated in similar fashion. For the past four months had had attacks of fever with slight jaundice, diarrhœa, and vomiting. Leucocytes 9240. The liver was slightly enlarged, the upper limit of dulness being at the level of fifth rib: edge not felt. No jaundice. No abdominal tenderness. While in hospital he had several attacks of malaise with slight chill and transient rise of temperature. Quinine was administered and the attacks gradually ceased.

8. Gonorrhœa.

Vaginitis, 1. Urethritis 5, of whom one had urethral hæmorrhage and another syphilis.

Gonorrhœal Rheumatism.

Six cases of polyarticular arthritis; 5 treated by vaccines. Cases of monarticular arthritis will be found under the headings of individual joints.

10. Influenza.

Of the 21 cases, 8 had abdominal pain.

Female, æt. 29. Previous admission 5 years ago for congenital heart disease. Three days before admission had several rigors, headache, vomiting, and sweated profusely. These symptoms rapidly cleared up, and though ulcerative endocarditis was at first suspected, her subsequent history negatived this diagnosis. The heart was first found to be affected when she was 3 years old. No cyanosis. No clubbing. Double murmur with a faint systolic thrill best heard over the pulmonary cartilage. X rays revealed no enlargement of the heart to the right. The physical signs were the same as were found during her previous admission.

11. Leukæmia.

(*a*) Myelæmia.—Four cases.

(1) *Male æt.* 57. Suffered for 3 months from what he supposed was pleurisy on the left side. Six weeks ago he noticed a mass in the left hypochondrium. No bleeding. Lost 17 lb. during first 2 months, since then weight stationary. Liver slightly enlarged and spleen almost down to the umbilical level. Red cells 4,478,125; hæmoglobin 80 per cent.; colour index 0·9. Leucocytes 201,000, of which 17·5 per cent. were myelocytes. Treatment consisted in liquor arsenicalis and 6 applications of X rays to the spleen. On discharge the spleen was only just palpable and the leucocytes were reduced to 54,000, 10·75 per cent. being myelocytes.

(2) *Female, æt.* 30. Came up for advice because she noticed a "lump" in her abdomen 3 weeks ago. The "lump" was an enormous spleen, the tip of which extended down into the pelvis. Liver felt 2 inches below the costal margin. No hæmorrhages had occurred. Red cells 3,150,000; hæmoglobin 60 per cent.; colour index 0·9; leucocytes 239,000, 27·5 per cent. being myelocytes. Two normoblasts and 3 megaloblasts seen. Liquor arsenicalis was given (15 minims daily) for 10 days, but as the spleen appeared to be enlarging, benzol was substituted. The size of the spleen decreased, and on discharge the leucocytes numbered 62,400, 16 per cent. myelocytes; 2 normoblasts and 1 megaloblast seen.

(3) *Female, æt.* 29. Noticed a lump in the left hypochondrium for 3 months. Increasing anæmia for 6 months. No bleeding. Spleen filled half the abdomen, and the liver was considerably enlarged. Red cells 4,125,000, hæmoglobin 45 per cent., colour index 0·5, leucocytes 652,800, 24·75 being myelocytes. One normoblast and 6 megaloblasts were counted. Arsenic in doses of 15 minims daily was given for 18 days, and ·45 grams of neo-salvarsan were injected. This resulted in the number of leucocytes decreasing to 4,370,000, 18 per cent. being myelocytes. The arsenic was then stopped, and 4 applications of X rays to the spleen were given, spread out over 3 weeks. The spleen became larger, and some abdominal pain was complained of. Red cells then were 3,100,000; leucocytes 368,000, 37 per cent. myelocytes. For the next 2 months benzol was given in doses of 10 minims *t.d.s.* gradually increased to 30 minims *t.d.s.* The spleen decreased in size and the leucocytes were reduced to 284,000, 23 per cent. myelocytes. She was then taken off benzol, and had a further 7 applications of X rays during the next 3 weeks. At the end of this, leucocytes numbered 138,000, 33 per cent. being myelocytes. She then had a further course of benzol, 30 minims

t.d.s., and on discharge 6½ months after admission the spleen was only 1 inch below the costal margin, leucocytes 10,700, 2·5 per cent. myelocytes. Red cells 5,200,000. A month later, leucocytes were 3800, and all myelocytes had disappeared from the blood.

(4) *Male, æt.* 41½. Recently had pain in both groins and right axilla. A few enlarged glands were palpable in these situations, and a mass was felt in the right lumbar region, presumably glandular. Spleen just felt. Red cells 5,000,000, leucocytes 21,920, 11·25 per cent. myelocytes. After taking 3 minims of benzol *t.d.s.* for one week, the blood was normal, leucocytes 7200, no myelocytes seen.

(*b*) Lymphæmia.

Three cases of acute lymphæmia, all ending fatally, and 1 non-fatal case of chronic lymphæmia.

(1) *Female, æt.* 49. Progressive anæmia and malaise for 2 months. Had the appearance and lemon-yellow coloured skin of pernicious anæmia. No bleeding had taken place. Spleen felt 2 inches below the costal margin. Liver slightly enlarged. A few small glands on both sides of the neck. Red cells 1,043,750, hæmoglobin 20 per cent., colour index 1·0. Leucocytes 87,760, 93·25 per cent. being small lymphocytes. Increasing doses of liquor arsenicalis had no effect, and patient died 3 weeks later. P.M.—Fatty heart. Slight general glandular enlargement. Liver and spleen gave free iron reaction. Nodule in liver on section proved to be a patch of caseation, possibly a gumma. No Wassermann reaction done.

(2) *Male, æt.* 42. History of increasing anæmia for 4 weeks preceded by joint pains. No bleeding. A few palpable glands in groins, axillæ, and neck. Spleen just palpable. Leukæmic retinitis. Red cells 1,262,500, hæmoglobin 12 per cent., colour index 0·5. Leucocytes 83,720, 99·5 per cent. being a mixture of large and small lymphocytes. Died 5 days later. P.M.—No petechiæ on skin or mucous membranes. Marrow in femoral shaft bright pink. Fatty heart. Free iron reaction in liver. Microscopically, spleen showed a reduction in the number of lymphocytes. Large lymphocytes very numerous in the marrow. Liver diffusely infiltrated with lymphocytes.

(3) *Female, æt.* 5. Small hæmatemesis 9 days ago; no melæna noticed; much vomiting, and for the last 5 days abdominal pain. Extremely anæmic. All the superficial glands were palpable and discrete. Tonsils enlarged. Gums oozing. Spleen palpable. Hæmorrhagic mottling of skin over abdomen. Dulness over the upper part of the sternum. Red cells 4,971,875, hæmoglobin 60 per cent., colour index 0·6. Leucocytes 87,080, 77 per cent. large and 18 per cent. small lymphocytes. Increasing doses of benzol were given, but this treatment only appeared to delay the end, though it had the effect of reducing the number of leucocytes to 4280; the differential count was not appreciably altered. Just before death, there was a rapid increase in the size of the glands. P.M.—The whole intestine showed marked lymphoid hyperplasia; all the superficial and deep glands were considerably enlarged. Petechial hæmorrhages on both pleuræ. Thymus weighed 47 grams. Microscopically all the tissues of the thoracic and abdominal viscera showed large atypical mononuclear cells with basophilic cytoplasm.

(4) *Female, æt.* 53. History of 2 years' malaise. Supposed to be a case of

congenital cystic kidneys before admission. Liver and spleen greatly enlarged. Tonsils very large. Anæmic. A few small discrete superficial glands were palpable in the neck, right axilla, and right groin. Red cells 3,825,000, hæmoglobin 75 per cent., colour index 0·9; leucocytes 28,220, 90 per cent. being small lymphocytes. Three weeks later, after taking increasing doses of liquor arsenicalis up to 9 minims *t.d.s.*, leucocytes were 27,440, 81 per cent. large and 10·75 per cent. small lymphocytes. No material change in the general condition.

12. Lymphadenoma.

Eight cases, 2 fatal. Both fatal cases and 3 of the non-fatal were admitted twice during the year. In 2 cases the cervical glands were enlarged, and microscopical examination of a gland showed them to be lymphadenomatous. In the remaining cases numerous groups of glands were enlarged, and in 5 out of the 6 cases the spleen was palpable.

Cases of interest.

(1) *Female, æt.* 27. For 6 months the glands in the left side of the neck had been growing progressively larger. She was admitted on the surgical side, but, as signs of a mediastinal growth were present, was transferred to a medical ward. X rays showed a large shadow in the centre of the thorax. The physical signs suggested pressure on the bronchus supplying the left upper lobe. Wassermann negative. A gland was excised and returned as "lymphadenoma." Spleen not palpable. Leucocytes 19,380, 80 per cent. being polymorphonuclear cells. After 4 months' treatment with liquor arsenicalis she was discharged; no marked improvement had occurred. Six months later she was readmitted. Arsenic had been taken all the time since she was discharged. Very marked arsenical pigmentation of skin. Spleen now palpable an inch below the costal margin. There were now definite signs of pressure on the left lower bronchus, and X rays showed the mass in the thorax to have increased in size. Palpable glands in both axillæ and also in right side of neck. Leucocytes 13,640; 84 per cent. polymorphonuclear cells, 3·5 eosinophils. Treatment: 11 applications of X rays to the enlarged glands and spleen. They diminished somewhat in size, and the general condition was improved.

(2) *Male, æt.* 14. Seven years ago had some cervical glands removed. Extremely anæmic. Liver and spleen much enlarged. Palpable cervical glands. Had bouts of pyrexia of varying duration. Red cells 2,062,500, hæmoglobin 20 per cent., colour index 0·5; leucocytes 10,300, polymorphonuclear cells 87 per cent., eosinophils 5·75 per cent. Seven weeks later, after taking liquor arsenicalis, his general condition was greatly improved. Red cells 3,950,000, hæmoglobin 70 per cent., colour index 0·9; leucocytes 7200, polymorphonuclear cells 73·5 per cent., eosinophils 7·5 per cent. Readmitted 6 weeks later complaining of abdominal pain. Treatment with X rays, atoxyl, and liquor arsenicalis had no effect, the spleen gradually enlarging and the anæmia progressing. The last blood-count showed red cells 660,000, hæmoglobin 10 per cent.; leucocytes 1300, 85 per cent. polymorphonuclear cells, 6·4 per cent. eosinophils. Abundant normoblasts seen. P.M.—Double hydrothorax; bronchial and mediastinal glands greatly enlarged. No extension into lungs. Ascites. Retro-peritoneal glands formed large masses. No venous thrombosis. Spleen infiltrated with lymphadenomatous tissue and weighed 16 ounces. No lardaceous reaction in any of the viscera. Microscopical report on a gland and spleen—"lymphadenoma."

(3) *Male, æt.* 24. Six months' history of malaise and vague pains in the limbs. Cervical and axillary glands enlarged. Spleen considerably and liver slightly enlarged. Gland excised for examination proved to be lymphadenomatous. Red cells 3,643,750, hæmoglobin 70 per cent., colour index 0·9; leucocytes 16,640. 1·5 per cent. eosinophils. Treatment, liquor arsenicalis. Discharged after 5 weeks and readmitted 3 weeks later. Masses of glands could be felt in both iliac fossæ, and there were signs of enlargement of the mediastinal glands. Spleen now reached below the umbilicus. Much dyspnœa and increasing anæmia, before death occurred 2 months after his re-admission. P.M.—General enlargement of all groups of glands. Discrete white nodules present in liver, spleen, and lungs. Microscopically spleen, liver, and lung returned as "lymphadenoma" + (histologically) tuberculosis. Mediastinal gland "lymphadenomatous." No tubercle bacilli were seen in the sections examined.

13. Malaria.

Five cases, 3 being invalided soldiers. In only 1 case was the spleen palpable. Blood examined for parasites in 4 cases, but in only 2 were they found to be present.

14. Marasmus.

Seven cases, 4 being fatal. No evidence of syphilitic epiphysitis in any of the fatal cases.

Case of interest.—Girl, æt. $1\frac{8}{12}$. Always liable to attacks of diarrhœa. Measles 8 months ago, and since then had 5 or 6 loose, frothy, and offensive stools a day. No vomiting. No physical signs of disease. Diagnosed as cœliac disease. Weighed 13 lb. on admission. Examination of fæces showed total fat 56 per cent., neutral fat 40 per cent., fatty acids 16 per cent. Steadily lost weight despite the administration of hyd. cum creta, pepsin, mineral acids, sherry whey, Benger's food, etc. P.M.—All viscera appeared to be healthy. Microscopically the liver was congested, and large amount of lymphoid cells in submucosa of ileum. Colon, stomach, duodenum, and pancreas all normal.

15. Measles.

Eight cases, 2 being nurses. One was a case of German measles. Two had broncho-pneumonia, and 1 of these was admitted as a supposed case of laryngeal diphtheria. Two swabs were negative.

16. Pyæmia.

Following septic eczema of hand, 1; chronic pyæmia, 1.

Fatal case.—Male, æt. 27. Had pleurisy 12 months previously. Illness began 9 days before admission with epigastric pain, vomiting and diarrhœa. After the 5th day the patient complained of headache and began to cough; the sputum was tinged with blood. On admission a few crepitations were heard at the right base and left apex. The spleen was not palpable, the abdomen was not full, and there was no deafness. The Widal reaction was negative. The *Staphylococcus aureus* was cultivated from the blood, and the urine contained *Staphylococcus albus*. On the 24th day the leucocytes numbered 10,120. On the 27th day the temperature was high and remittent, and an abscess was detected in the left shoulder; the patient sweated profusely. Death occurred

on the 28th day. P.M.—The intestines were normal. Pyæmic abscesses were found in the lungs and kidneys, and subperiosteal abscesses over the great trochanter. *Staphylococcus aureus* was cultivated from the blood, and this organism, together with *Bacillus paratyphosus*, was found in the spleen.

17. (*a*) Purpura.

Twelve cases. All recovered. Four had arthritis, 2 hæmatemesis, 3 melæna, 4 hæmaturia, 3 abdominal pain, 4 oozing from the gums, 2 nephritis, 2 epistaxis, 1 vaginal hæmorrhage, 1 urticaria, 1 subconjunctival hæmorrhage; all had a purpuric rash on skin. There were 3 cases diagnosed as arthritic purpura, 8 as purpura simplex, and 1 case of Henoch's purpura. One was possibly a case of lymphadenoma. One man had cirrhosis of the liver and gout. In no case was the spleen palpable. Blood examined in 4 cases; in 1 there was a leucopenia, in 1 the leucocytes numbered 16,800, and in 2 the blood was quite normal. In the 2 cases where the coagulation time was determined, it was found to be normal in 1 and slightly increased in the other.

Cases of interest.

(1) *Female, æt.* $5\frac{5}{12}$. Three days' history of diarrhœa, vomiting and abdominal pain, and melæna noticed 12 hours ago. No tenesmus. Doubtful mass felt in right iliac fossa. Laparotomy for supposed intussusception. *Nil* abnormal found. Four days later a purpuric rash appeared on the arms and buttocks.

(2) *Male, æt.* 11. For the last year had lumbar pain and been anæmic. Three weeks ago epigastric pain, fever, melæna, and purpuric spots on limbs. Coagulation time of blood normal. 16,800 leucocytes, 80 per cent. being polymorphonuclear cells. Spleen not felt. The urine contained a little blood. No palpable glands. Heart *nil*. Bouts of pyrexia suggestive of lymphadenoma.

(3) *Female, æt.* 16. This was possibly a case of hæmophilia. Always bruised easily. Occasional profuse epistaxis and growing pains. Tonsillectomy and mastoid operation in 1909, both operations being followed by much bleeding. Menstruation began 3 years ago, and had always been profuse. Admitted with a 24 hours' history of abdominal pain and vomiting, streaks of blood being seen in the vomit. A few purpuric spots were present in the abdomen. During her stay in hospital she had several attacks of abdominal pain, and a fresh crop of spots on one arm.

(*b*) Hæmophilia.—Two non-fatal cases.

(1) *Male, æt.* 18. Previous admissions, 1907, right knee; 1909, epistaxis and left ankle; 1912, left elbow and right knee. One brother was the only other bleeder in the family. Admitted with 10 days' history of constipation. Every sign of acute obstruction. Bruises on both legs. Symptoms gradually abated; they were thought to be due to a hæmorrhage either into the bowel wall or mesentery.

(2) *Male, æt.* 9. No other bleeders in the family. Severe hæmorrhage when the cord separated. Diagnosed as hæmophilic when 14 months old. Had 40 injections of horse-serum when aged 3. Been attending the out-patient department for the last 15 months for swollen elbows. Admitted for epistaxis. Two months after discharge he was readmitted on account of extreme anæmia. Large bruise over sacrum. His appearance suggested intra-abdominal hæmorrhage, *i. e.*, great thirst, sweating, and restlessness. No melæna subsequently. Gradually recovered, but while in hospital another bruise appeared over one wrist.

18. Acute Rheumatism.

Sixty-six cases, 30 being invalided soldiers, the vast majority of whom had a subacute attack. Two of these had a previous history of acute rheumatism, but in neither case was there any cardiac lesion. Three other soldiers had had a certain amount of rheumatism before the present attack, and 1 of them had early mitral stenosis. No cardiac lesion in the remaining 25.

Civilian cases: 20 females, 16 males. In the 29 cases treated for first attack 19 had no past history of rheumatism; 1 had a history of rheumatism and growing pains; 1, recurring tonsillitis and growing pains; 2, recurring tonsillitis; 1, chorea and tonsillitis; 1, chorea; 4, previous rheumatic pains. Seven out of these 29 cases had mitral regurgitation and 1 mitral stenosis. In 6 it was the second attack, and 4 of these had mitral regurgitation. In 1 it was the third attack, and this patient had mitral disease. Four cases were readmitted, 2 with another attack of acute rheumatism, 1 with chorea, and 1 with pericarditis. Nodules were present in 2 cases.

19. Rheumatoid Arthritis and Chronic Rheumatism.

Eight cases of chronic rheumatism. One of these was a readmission, previously admitted for diaphragmatic hernia of the stomach. Mitral regurgitation in 1 case; past history of erythema nodosum in 1.

Rheumatoid arthritis: 8 males, 11 females. In 2 cases the spine was affected, and in the remaining cases numerous joints were involved. Tubercle complement fixation test positive in 1 and negative in 5. In 10 there was marked pyorrhœa alveolaris, and in 1 a vaginal discharge had persisted for years.

Cases of interest.

(1) *Female, æt.* 30. History 3 years. Hands and feet affected, fusiform swellings of the interphalangeal joints. Pyorrhœa. Post-tussive crepitations at right apex. Tubercle complement fixation test negative. Marked rise of temperature followed injection (O.T.) and there was a definite local reaction. Further injections of B.E. tuberculin had little effect on the condition of the joints.

(2) *Male, æt.* 29. Contracted gonorrhœa 10 years ago. Four years' history of pain starting in the right foot, and then right knee and ankle, and both wrists. Typical rheumatoid fingers. Much wasting of muscles and impaired mobility of all the affected joints. Changes most marked in left elbow, which was excised. Enormous numbers of melon-seed bodies found at the operation. A very useful elbow resulted from this treatment.

(3) *Male, æt.* 38. Sciatica 12 years ago, followed by pain and stiffness in the spine, and as time went on various other joints were affected. Contracted diphtheria while in hospital and died. P.M.—Brown atrophy of myocardium.

20. Rickets.

Two cases. One fatal case in which the temperature rose to 107° F. before death. Lungs congested. No meningitis.

21. Scarlet Fever.

One case found to have a rash on admission and at once sent to Stockwell.

22. Septicæmia.

One fatal case in a nurse starting with a sore throat. Streptococcus grown from the tonsils.

23. Syphilis.

Primary.—Intravenous injections of salvarsan, 6; neo-salvarsan, 4; Billon's arseno-benzol, 1. Readmitted for second injection, 3.

Secondary.—Salvarsan, 29; neo-salvarsan, 45; arseno-benzol, 17. Readmitted for second injection, 15; for third injection, 1. Readmitted with cellulitis of arm at site of injection, 1.

Tertiary.—Salvarsan, 3; neo-salvarsan, 13; arseno-benzol, 2. Readmitted for second injection, 3; for third injection, 1.

Congenital.—Salvarsan, 3; neo-salvarsan, 2. Readmitted for second injection, 1.

Fatal case.—Male, æt. 2 months. The mother had been married twice and had had three children by her first husband. After her second marriage she had two miscarriages and then gave birth to a child. The child was admitted with typical signs, and died on the third day. P.M.—The liver was smooth and hard and the spleen enlarged. Epiphysitis was found at the lower end of the femur. Microscopically the spleen showed congestion without fibrosis, and the liver showed pericellular cirrhosis.

24. Tetanus.

No case recovered.

Male, æt. 54. Primary focus, a septic finger; incubation period 10 days. Finger amputated. Treated with serum. *Bacillus aerogenes* cultivated from wound. Died 3rd day.

Male, æt. 63. Primary focus, a septic toe due to a perforating wound by a rusty nail; incubation period seven days. Toe amputated. Treated with serum and nutrient enemata. Died 3rd day.

Male, æt. 55. Primary focus, a septic foot due to a perforating wound by a rusty nail; incubation period 14 days. Treated with serum, chloral, and carbolic. Died 4th day.

Male, æt. 43. Primary focus, a septic toe due to a perforating wound by a rusty nail; incubation period 12 days. Treated with serum and chloral. Died 5th day.

Female, æt. 10 *days.* Primary focus, a septic umbilicus. Treated with serum and chloroform. Died 2nd day.

25. General Tuberculosis.

Six cases. Five were fatal and the other 1 was sent to a home for the dying. Three cases occurred in infants, and the oldest patient was 13. Strong family history of phthisis in 3. Two cases on admission were supposed to be enteric, but Widal's test was negative. Diagnosis confirmed by post-mortem examination in the 5 fatal cases. In 2 cases the liver and spleen were enlarged.

Cases of interest.

(1) *Girl, æt.* 13. Strong family history of tubercle. Previous history whooping cough, and 5 weeks ago "influenza." Crepitations all over the chest. X rays showed disseminated disease throughout the lungs. Meningeal symptoms before death.

(2) *Girl, æt.* 12. Cervical glands excised when 7, at St. Bartholomew's. Been attending here as an out-patient for tuberculosis. Diarrhœa, cough and wasting for 3 weeks. Tubercle bacilli present in sputum and fæces. On admission a few crepitations were heard at the left apex, but the rest of the lungs rapidly became involved. Small hæmoptysis once. High intermittent pyrexia. Discharged to St. Luke's Home.

26. Acute Abscess.

Situation.—Pharyngeal, 1; alveolar, 3; neck, 14; face, 4; parotid, 1; mastoid, 2; perinephritic, 2; abdominal, 1; retroperitoneal, 1; abdominal wall, 1; subhepatic, 1; breast, 1; subpectoral, 1; back, 3; periurethral, 3; ischio-rectal 15; axillary, 8; iliac, 1; inguinal, 1; thigh, 3; knee, 1; leg, 2. Readmitted, 2. Erysipelas, 1; gonorrhœa, 1; fistula-in-ano, 1.

Female, æt. 6 *months.* Illness began a week before admission with a swelling in the left lumbar region. Admitted with a lumbar abscess which was incised. Died on 18th day with signs of internal hæmorrhage. P.M.—Ulcers were found in the duodenum, two old and two new. Infarcts were present in the spleen, liver, and lungs. Hæmorrhage had taken place into the bowel. Microscopically, the splenic infarct showed acute inflammatory changes. The abscess was subcutaneous, and no bare bone could be felt in its floor.

27. Chronic Abscess.

Situation.—Multiple, 1; lumbar, 2; psoas, 6; back, 1; chest wall, 1; abdominal wall, 1; iliac, 3; neck, 6; thigh, 2; leg, 1; arm, 1. Readmitted, 1.

Male, æt. 22. Chronic abscess of leg. Eighteen months previously the patient had run a thorn into the calf of the right leg just above the tendo-Achillis, and for the last 2 months there had been a swelling at the spot. Beneath the skin was felt a moderately hard, flat, lobulated tumour. On incision, an abscess was found from which the thorn was removed.

28. Cellulitis.

Situation.—Scalp, 1; neck, 10; chest wall, 2; abdominal wall, 1; penis, 1; scrotum, 1; groin, 1; toe, 2; foot, 8; ankle, 2; leg, 1; knee, 4; thigh, 1; fingers, 10; hand, 20; arm, 10. Readmitted, 1. Diabetes, 5. Erysipelas, 1.

29. Sinus.

Groin, 1; thigh, 1; finger, 1; renal sinus following nephrectomy, 1; post-operative sinuses of abdominal wall, 4.

30. Carbuncle and Furuncle.

Furunculosis, 4. Carbuncles—neck, 6; arm, 1; back, 3.

Fatal cases, 3. Death from septicæmia, 2; pyæmia, 1.

31. Various General Diseases.

Two cases of varicella in nurses.

Cases of interest.

(1) Actinomycosis.

Female, æt. 16. Abscess of buttock, which was incised. Streptothrix found in the pus and urine.

(2) Pellagra.

Girl, æt. $4\frac{9}{12}$. An only child. When $1\frac{8}{12}$ years old, rash appeared on face.

Never walked well. Rash involved flush area and tip of nose, hands and lower halves of forearms and upper halves of legs. Movements tremulous. Slight reeling ataxy. Discs normal. Three days after ·06 grm. of neo-salvarsan, the rash had almost disappeared.

(3) Trichinosis.

Female, æt. 27. Recently lived in Canada, where she had frequently eaten raw pork sausages. Twelve months ago sudden œdema of face with pain in the limbs and tenderness of the muscles. Three days later a piece of muscle was excised and the *Trichina spiralis* demonstrated. Recurrence a month ago with similar but less severe symptoms. All muscles rather tender. X rays showed a calcified patch in one ligamentum patellæ "probably due to trichinosis." Apyrexial. Leucocytes 7400; 1 per cent. eosinophils; 45 per cent. small lymphocytes. Urine normal.

(4) Beri-beri.

Two cases in soldiers just home from India.

(*a*) *Male, æt.* 37. Recently stationed at Bareilly. Before going there had been in Calcutta for 2 years, where there were numerous cases of beri-beri. Attack started in May, 1914, 3 months after leaving Calcutta. At that time the legs and lower part of the trunk were œdematous and he also had præcordial pain and numbness of the legs. Just before reaching Marseilles early in November had a second attack of a similar nature, but accompanied by more œdema, and several fainting attacks. On admission convalescent. Still had numbness of the legs with slight sensory loss and considerable muscular wasting. Treatment, strychnine.

(*b*) *Male, æt.* 25. Stationed at Frezpore for 12 months and at Alexandria for the last 2 months, before leaving for the front. As far as he knew had never been in contact with beri-beri. The day after landing at Marseilles, sudden numbness and swelling of legs occurred. Arms and trunk unaffected. Also had attacks of palpitation and of dyspnœa. Slight sensory loss over legs to pin-pricks. Knee-jerks diminished. Legs slightly wasted.

Both the above cases rapidly recovered.

DISEASES OF THE RESPIRATORY SYSTEM.

32. Diseases of the Nose.

(*a*) Deflected Nasal Septum.—Tonsils and adenoids, 16; ethmoiditis, 7. Readmitted, 1.

(*b*) Enlarged Turbinals.—Turbinectomy in all. Tonsils and adenoids removed in 4.

(*c*) Various.—Nasal abscess, 2; intra-nasal lupus, 8; hypertrophic rhinitis, 3; atrophic rhinitis, 1; endothelioma of nose, 1; angioma of septum, 1. Adenoids also in 2. Readmitted 2.

33. Diseases of the Antrum and Sinuses.

(*a*) Ethmoiditis.—Asthma, 1; maxillary antritis, 1. Readmitted, 1.

(*b*) Nasal Polypi.—Hypertrophic rhinitis, 1. Readmitted, 1.

(*c*) Frontal Sinusitis.—Acute sinusitis, 3; empyema of sinus, 2; mucocele, 2 (1 suppurating).

(*d*) Maxillary Antritis.—13 cases, bilateral in 2.

(*e*) Malignant Tumours.—Recurrent carcinoma of antrum, 1; round-celled sarcoma of ethmoid, 1; sarcoma of antrum, 1.

(*f*) Various.—Acute dacryocystitis and ethmoiditis, 1; antral cyst, 1.

34. Diseases of the Larynx.

(*a*) Laryngitis.—Acute, 1; chronic, 3; tuberculous, 3; syphilitic, 1.

Cases of interest.

Male, æt. 38. Tuberculous laryngitis. Epiglottis removed 2 years previously. Readmitted with persistent laryngeal pain. Alcohol (80 per cent.) injected into the superior laryngeal nerve.

Male, æt. 31. Syphilitic laryngitis and myasthenia gravis. Syphilis 14 years previously. Cough 6 months, and hoarseness 2 months. Dysphagia 1 month. Deficient air entry into both lungs. Deflected septum and chronic laryngitis. No tracheal stenosis. Treated with expectorants. Wassermann reaction positive.

(*b*) Benign Tumours.—Papilloma, 2; fibroma, 1.

(*c*) Carcinoma.—Treated with radium, 6. Readmitted, 4.

Male, æt. 49. Admitted four times: January 26th, excision of glands; February 2nd, partial excision of growth; April 17th, transthyroid pharyngotomy and laryngectomy; August 21st, excision of recurrent glands; December 8th, excision of recurrent glands together with the carotid arteries on the R. side. Discharged December 21st.

(*d*) Various.—Laryngeal stenosis, 3 (following cut throat, 1; following diphtheria, 2); laryngismus stridulus, 3; laryngitis stridulosa, 1; old tracheotomy, 1. Readmitted, 1.

35. Bronchitis.

Fifty-four cases, 2 fatal. Twenty-one were soldiers invalided home, and most of them were convalescent on admission. Cultures were made from the sputum in 5 cases. Streptococcus grown in 2; *Staphylococcus albus* and a streptococcus in 1; *Staphylococcus albus* and *Bacillus septus* in 1; Friedlander's bacillus in 1. The latter and 1 of the streptococcal cases were treated with autogenous vaccines without much benefit.

Case of interest.—Female, æt. 35. Three previous admissions for Graves's disease. May, 1910, both superior thyroids ligatured; June, 1911, right inferior thyroid vessels ligatured followed by complete aphonia; December, 1911, right lobe of thyroid removed, and cut end of recurrent laryngeal nerve joined to the vagus. Voice returned some months after the last operation. For the last 6 weeks suffered from cough and dyspnœa. Pregnant 6 months. Rhonchi all over chest. Slight exophthalmos. Von Graefe's and Stellwag's signs still present. No tremor. Pulse averaged 100. Aborted 2 weeks after admission, and the bronchitis rapidly cleared up.

The 2 fatal cases were aged $1\frac{6}{12}$ and 72 respectively. The latter patient was very emphysematous, and a blood-count showed 6,000,000 red cells with hæmoglobin 100 per cent.

36. Broncho-pneumonia.

Forty-nine cases, 16 fatal. Mortality 32·6 per cent. Fourteen of the fatal cases were in infants less than a year old. One case had meningeal symptoms, but no meningitis was found at the autopsy.

Case of interest.—Boy, æt. $\frac{3}{12}$. Sudden dyspnœa a few hours before admission. Extremely cyanosed; œdema of legs and abdominal wall; rhonchi all over the chest. P.M.—Congenital absence of right lung. Thymus enlarged. The left lung had three lobes and was riddled with broncho-pneumonia.

37. Pneumonia.

Ninety cases of acute lobar pneumonia, 62 of which were in males. Eight fatal cases, 7 being males. Mortality 8·88 per cent.

In the fatal cases complications were: Peritonitis in 1; chronic nephritis in 1; empyema and pericarditis in 1; in 2 the lung was in a condition of purulent infiltration.

Lobes affected: Left upper, 1; whole left lung, 1; whole right lung, 1; right middle and lower, 1; whole left lung and right upper, 1; right lower and upper, 1; right upper and middle, 1.

In the non-fatal cases, complications were: Empyema in 6; pulmonary tuberculosis in 1; cerebral diplegia in 1.

Cultures made from the pus in the cases of empyema: Pneumococcus in 3; *Staphylococcus aureus* in 1; atypical streptococcus in 1; and in 1 case pus cells and diplococci were seen in films, cultures sterile.

Three cases had vaccines on admission. In 1, given 6th day, crisis occurred the next morning. Another had 2 doses on the 2nd and 4th day, and lysis occurred, temperature being normal 8th day. The 3rd case had 2 doses on 2nd and 3rd days of illness, and died on 17th day. P.M.—Unresolved pneumonia, empyema, and suppurative pericarditis.

The temperature fell by crisis in 47 and by lysis in 26. In 3 cases crisis had occurred before admission.

Lobes affected: Right lower, 25; left lower, 37; right upper, 6; whole left lung, 1; right upper and lower, 1; left lower and right upper, 1; indefinite signs, 4; unstated, 1.

Cases of interest.

(1) *Male, æt.* 26. No illnesses until 3 days ago. Consolidation of left lower lobe. Crisis 7th day. Post-critical rise of temperature, which gradually came down and was normal 58th day of illness. During this time a negative aspiration was done. Widal negative. X rays failed to show any abnormal condition of lungs. Nine days after admission 11,720 leucocytes present. No pneumococci and no tubercle bacilli were found in the sputum. Recently readmitted with signs of extensive infiltration of both lungs. Tubercle bacilli now present in sputum.

(2) *Male, æt.* 44. Admitted 2nd day with signs of consolidation of right middle and upper lobes. A right empyema developed, and was treated by resection of rib and drainage. Pneumococcus grown from the pus. Death occurred under the anæsthetic. P.M.—Unresolved pneumonia, shaggy pericardium full of semi-purulent fluid. This patient had 2 doses of stock pneumococcal vaccine on 2nd and 3rd days of illness.

Male, æt. 6. Admitted 7th day. Tubular breath sounds right axilla. Abdomen moved poorly and was both distended and rigid. Died 2 days after admission. P.M.—Right lower and upper lobes solid. Plastic general peritonitis. Appendix healthy.

38. Bronchiectasis.

Ten cases, 4 fatal. Left base was affected in 5; right base in 2; right middle lobe and whole of left lung in 1; whole left lung in 1; præcordial region in 1. Sputum examined in 5 cases; no tubercle bacilli in 3; short chained streptococcus grown in 1; *Bacillus influenzæ* in 1. Clubbing of fingers present in 7 out of the 8 cases in which the presence or absence of the sign was stated. In only one case was there a history of a foreign body in the trachea. Two cases were treated with an autogenous vaccine, one of them deriving much benefit. Hæmoptysis in 3 cases. In 1 case the condition was probably secondary to growth. In 4 cases the symptoms started directly after an attack of pneumonia.

Complications.—Lumbar abscess in 1; pneumonia and adherent pericardium in 1; cerebral abscess and meningitis in 1.

Cases of interest.

(1) *Male, æt.* 49. A readmission. Discharged 8 months ago with the diagnosis of "mediastinal tumour." Signs of bronchiectasis just internal to the left nipple, much pinkish sputum, early clubbing of fingers. No tubercle bacilli and no elastic tissue seen in sputum, which on one occasion was blood-stained.

Culture.—Short-chained streptococcus. Numerous injections of an autogenous vaccine resulted in a gain of 20 lb. in weight, and a diminution in the amount of sputum.

(2) *Male, æt.* $3\frac{6}{12}$. Cough off and on ever since an attack of bronchitis two years ago. *Bacillus influenzæ* grown from sputum, and many injections of an autogenous vaccine were given in out-patient department. Fingers slightly clubbed. Died 2 months later. P.M.—Whole of left lung bronchiectatic; right lung congested but otherwise normal; no evidence of tuberculosis in any part of the body.

(3) *Male, æt.* 54. Three years ago, a piece of bone from a mutton chop got into the trachea; for the next three months had pain in the right side of the chest and frequently coughed up small amounts of blood. Then the bone was coughed up with about a quart of blood. Ever since has coughed up large amounts of offensive sputum and occasionally blood was mixed with it. Signs of bronchiectasis at right base; 2 weeks after admission sudden severe headache followed by a left hemiplegia. P.M.—Half an inch above the roof of the right lateral ventricle, a small abscess was found which had tracked down into the ventricle. Pons and medulla surrounded by thick pus. Dense pleural adhesions at the base of the right lung, which was bronchiectatic.

(4) *Male, æt.* 27. Had a cough for 8 years. No hæmoptysis. Fingers clubbed. Large moist crepitations all over both lungs. Extreme anæmia. No abdominal viscera palpable and no ascites. Feet and ankles œdematous. Urine contained a cloud of albumin. Sputum copious but not offensive. No tubercle bacilli found in sputum. The latter became offensive latterly and ascites developed before death. P.M.—Left lung entirely and right lung to a much less degree bronchiectatic. Granular kidneys. Amyloid spleen.

39. Pulmonary Tuberculosis.

Ninety-three cases, 8 of which were fatal.

Complications in the fatal cases: Bronchiectasis and miliary tuberculosis of lungs in 1; ulcerative endocarditis in 1; general perforative peritonitis in 1; pneumonia, general tuberculosis in 1; ulceration of intestine in 5.

In the non-fatal cases: Cirrhosis of liver in 1; tubercular wrist in 1; pleural effusion, 1; alcoholic peripheral neuritis in 1; dyspepsia in 1. Two cases had an artificial pneumothorax made; considerable improvement resulted in 1, but in the other the operation was soon followed by a good deal of hæmoptysis. In 1 case where there was a remittent pyrexia which was unaffected by absolute rest, 2 injections of neo-salvarsan failed to reduce the temperature.

Cases of interest.

(1) *Male, æt.* 40. Diagnosed as having phthisis 18 years ago. Strong history of alcohol. Signs of infiltration of the right apex. Tubercle bacilli in sputum. Well-marked peripheral neuritis in legs.

(2) *Male, æt.* 37. Contracted syphilis 14 years ago. Slight hæmoptysis 8 months ago. Three months' history of cough, night sweats and weakness of the limbs. Extensive signs of disease all over both lungs. All jerks absent. Slight sensory loss over legs. Plantar response flexor. Diagnosed during life as subacute combined degeneration and pulmonary tuberculosis. Tubercle bacilli in sputum. P.M.—Cavities in both apices. Both lower lobes broncho-pneumonic. General peritonitis due to perforation of a solitary tuberculous ulcer in the lower part of the ileum. Sections of various regions of the cord and of the anterior crural, sciatic, ulnar and musculo-spiral nerves failed to reveal any degenerative or histological changes.

(3) *Male, æt.* 34. Dyspepsia for last 3 years, frequent vomiting and much pain directly after food for 3 months with increasing malaise. Anæmic. Looked very ill. Remittent pyrexia. Admitted as ? carcinoma of stomach. Systolic apical murmur present which was conducted a short way towards the axilla. A few crepitations heard at the right apex. Spleen not palpable. X rays showed disease at both apices. The patient was so extremely ill that the chest signs did not appear to be sufficient to account for the general condition, and ulcerative endocarditis was suggested as probably also being present. Blood-culture sterile. Tubercle complement fixation test negative. Profuse sweating was constantly present, and hæmoptysis measuring half a pint took place once. A rigor occurred shortly before death. P.M.—Cavity in right apex. Upper half of both lungs showed extensive tuberculous disease. Stomach normal. Two very large ulcerating vegetations on the mitral valve. The latter was cut and reported on as "acute inflammation, masses of streptococci, no histological tuberculosis, tubercle bacilli present in scanty numbers."

(4) *Male, æt.* 14. Two weeks' history of cough, headache, and pains in the chest. Cyanosis marked. Respiration 60. Harsh breath-sounds at both apices and a few crepitations heard in right axilla. Liver and spleen just palpable. The signs in the chest spread rapidly and the temperature was of a remittent type, usually reaching 104° F. at night. Died 13 days after admission. P.M.—Miliary tuberculosis of lungs. Caseous masses in both apices. Caseous bronchial glands.

40. Pleurisy.

Thirty-nine cases, 29 being males. One fatal case. Effusion diagnosed in 28 cases. Nineteen were aspirated; in 8 of these a few c.c. only were withdrawn for cytological examination. Out of 16 in which the effusion was examined small lymphocytes were abundant in 15: in 1 case the effusion was blood-stained.

Cases of interest.

(1) *Male, æt.* 63. Thoracic pain and dyspnœa for 3 weeks. Left-sided effusion. Five pints of clear fluid aspirated in which numerous small lymphocytes were found. No tubercle bacilli in sputum. Discharged apparently well 2 months later. Readmitted 8 weeks later with right-sided abdominal pain, which for a long time was thought to be of pleural origin. Gradually a hard immobile mass made its appearance just above and to the right of the umbilicus. A laparotomy was performed at which the tumour was thought to be growth. Microscopically it proved to be tuberculous. Several applications of X rays to the abdomen reduced the size of the mass, and though symptoms suggestive of intestinal obstruction developed, they quietened down and patient was discharged in fairly good health 7 months after readmission.

(2) *Male, æt.* 33. Two years ago was kicked in the scrotum and passed blood in the urine for the next 5 days. No further trouble till 4 months ago. Then complained of left-sided pain and was in Chatham Hospital until he was admitted here. Left-sided pleural effusion tapped 4 times before admission. The effusion was still present and in addition the left vesicular seminalis and epididymis were found to be tuberculous, and tubercle bacilli were present in the urine. Condition unaltered on discharge.

(3) *Male, æt.* 10. Admitted with a left pleural effusion. This was aspirated and numerous small lymphocytes were found. A fortnight later he began to have severe headaches and developed a convergent squint and facial weakness. Numerous small lymphocytes present in the cerebro-spinal fluid. Died 12 days after the onset of the meningeal symptoms. No P.M.

41. Empyema.

Thirty-one cases, 5 ending fatally. Twenty-eight of the cases occurred in males. Mortality 16·13 per cent. Three cases were admitted with sinuses following operations for empyema. Two of these were treated by Estlander's operation, and one of the latter subsequently developed signs of a frontal abscess: unfortunately no P.M. was allowed. In the remaining 28, treatment was by resection of rib and drainage in 26; an incision and drainage in 1 case where the empyema was pointing, and in 1 case the empyema (measuring three pints) was only discovered at the autopsy. In 11 cases the empyema followed a definite attack of pneumonia, and in 1 of these, 17 years ago, an attack of pneumonia had also been followed by an empyema.

Bacteriology.—Pneumococcus, 11; streptococcus, 4; *Staphylococcus aureus*, 1; cultures sterile, 4; contaminated, 1; no cultures taken, 6.

Complications.—Post-diphtheritic paralysis, 1; simple pericarditis, 2; lumbar abscess, 2; pulmonary tuberculosis and broncho-pneumonia, 1; frontal abscess, 1.

Cases of interest.

(1) *Male, æt.* 48. Recently had pneumonia. Left-sided pleural effusion and pericardial rub. The pleural effusion was purulent, and was treated by

resection of rib and drainage: the pericardium was also tapped and some clear fluid withdrawn. Pneumococcus grown from the former; cultures of the pericardial effusion were sterile. Recovery.

(2) *Male, æt.* 15. Pneumonia 3 weeks ago. Admitted with a right-sided empyema which was treated by rib resection and drainage. Three weeks later a pericardial rub developed, followed by signs of effusion. Culture of pus from pleura—pneumococcus. Eight injections of a stock vaccine were given with considerable benefit. Discharged with a sinus 3 months after admission.

(3) *Male, æt.* 5. Left empyema tapped before admission. Resection of rib and drainage. Pneumococcus grown from the pus. Six weeks later the character of the pus altered, and a diphtheroid bacillus was grown from it. Twenty-four days later nasal speech, palatal paralysis, dysphagia and diminished knee-jerks. No diphtheroid bacilli grown from nasal or throat-swabs. These symptoms gradually cleared up, and a month later the pneumococcus was again grown from the empyema. Discharged cured 4 months after admission.

(4) *Female, æt.* 3. "Pneumonia" 6 weeks ago. Admitted with a right-sided empyema. Cultures of pus, which were mixed with blood, were sterile. High remittent pyrexia. Died 3 weeks later. P.M.—Caseous focus right apex. Right lung solid from confluent broncho-pneumonia. No active tubercle in lungs. Caseous mesenteric and bronchial glands.

42. Pneumothorax.

Five cases, all males, 2 ending fatally.

Non-fatal cases.

(1) *Male, æt.* 43. Twelve months ago operated on for fistula *in ano*. Five months ago, pleurisy. Aspirated twice. Cultures sterile, but a guinea-pig which was inoculated with the fluid developed tuberculosis. Three months ago, sudden attack of dyspnœa; no pain. Admitted with a left pyo-pneumothorax. Aspiration of a turbid fluid performed 5 times, the average amount withdrawn being 3 pints. Cultures of fluid sterile and no tubercle bacilli seen. Eventually *Staphylococcus aureus* was grown, and soon afterwards a rib was resected and the pleura drained. Shortly before discharge tubercle bacilli were found in the pleural fluid. Condition on discharge was improved, but a sinus persisted.

(2) *Male, æt.* 32. Had had a cough for 3 months with occasional small hæmoptyses. Five weeks ago, sudden pain in the left side of the chest. Admitted with a pyo-pneumothorax. As soon as the fluid was found to be purulent, a rib was resected and drainage effected. No cultures made. The temperature was irregular for 9 weeks and then became normal. No tubercle bacilli in sputum. Discharged with a sinus 5 months after admission.

(3) *Male, æt.* 48. Treated elsewhere a year ago for gastric ulcer and hæmatemesis. No history of any chest trouble until patient had a sudden severe attack of pain in the left side of the chest. Left-sided pneumothorax present on admission. Aspirated, and, as fluid was purulent, the cavity was drained, a rib being resected. No culture taken. Three weeks later vomited "coffee-grounds" and had melæna on several occasions. No signs of tubercle in the lungs. No tubercle bacilli in sputum. Discharged 10 weeks later practically well.

Fatal cases.

(1) *Male, æt.* 29. Previous history: rectal abscess and frequent colds. During

a fit of coughing the day before admission, sudden severe pain in chest and urgent dyspnœa. Typical right-sided pneumothorax. No tubercle bacilli in sputum. Aspirated twice and turbid fluid withdrawn. *Staphylococcus albus* grown from a culture; no tubercle bacilli found in the fluid. Rib resected and drainage effected. Blood cultures sterile. High intermittent pyrexia until, 3 months after admission, he contracted diphtheria and died shortly afterwards. Swab from fauces positive. P.M.—Cavity in right apex. Recent tuberculous broncho-pneumonia throughout the left lung. Small cauliflower vegetation on aortic valve. Liver, spleen, and kidneys were lardaceous. Microscopically, no tubercle bacilli found in the vegetation; short-chained streptococci and bacilli seen.

(2) *Male, æt.* 36. Ten years' history of cough, night sweats, and occasional hæmoptysis. Gradual change for the worse a week ago. Increasing dyspnœa. No pain. Admitted in a dying condition with a right-sided pneumothorax. P.M.—Diagnosis confirmed; cavities in both apices. Recent shaggy pericarditis. Miliary tubercles scattered throughout the left lung. Right lower lobe showed evidence of tuberculous broncho-pneumonia.

43. Growth of Lung or Mediastinum.

Ten cases, 7 fatal. In the fatal cases examination of the growth was—round-celled sarcoma, 2; spindle-celled sarcoma, 1; spheroidal-celled carcinoma, 1; endothelioma, 1. No P.M. in 1 case. In 5 out of the 6 cases examined the growth had invaded the lung substance, and the starting point appeared to be the mediastinal glands. In 1 case the growth appeared to have started in the lung. Five out of the 10 cases had clinically signs of superior vena caval obstruction. Hæmoptysis in 4. Axillary glands enlarged in 3. Pleural effusion in 3. Hæmorrhagic pericardial effusion present in 2.

Cases of interest.

(1) *Male, æt.* 48. Cough and loss of weight with sputum occasionally tinged with blood for the last 15 months. Treated as a case of pulmonary tuberculosis, and was in a sanatorium for 7 months before admission. Admitted with signs of pressure on the superior vena cava. Enlarged hard glands in left axilla and left side of neck. X rays showed a growth filling up the whole of the left side of the chest. There were signs of pressure on the left brachial plexus. Frequent hæmoptyses before death. P.M.—Left lung extensively bronchiectatic, and was compressed within a much thickened pleura. A mass of growth had burrowed under the clavicle and contained the cords of the brachial plexus. Superior vena cava had had its lumen invaded by growth, but the blood had not clotted. Bronchial glands contained growth, and extended into the hilum of the right lung. Left bronchus compressed. Microscopically the growth was a spheroidal-celled carcinoma.

(2) *Male, æt.* 50. Admitted with a history of 4 weeks' increasing dyspnœa and signs of obstruction of superior vena cava. No cough or pain. Wassermann negative. X rays showed a mediastinal growth. Discharged in a little altered condition 3 weeks later, but was soon readmitted coughing up a good deal of blood. Enlarged glands now palpable in both axillæ. Gradual increasing dyspnœa before death occurred 4½ months after the onset of symptoms. P.M.—Double hydrothorax. Root of right lung invaded by growth. Mass of growth in superior mediastinum which had fungated into the lumen of the superior vena cava. Nodules of growth in right lung. This was a round-celled sarcoma.

(3) *Female, æt.* 44. Had a cough for 11 months. Hæmoptysis at onset and since then attended the tuberculous department as an out-patient: during this time she had 3 months' sanatorium treatment. Left arm suddenly became powerless a week before admission. Signs of pressure on the left bronchus. Marked wasting of the muscles of the left arm and shoulder. Skin icteric. No tubercle bacilli or evidence of growth in the sputum. Complete left hemiplegia developed gradually before death occurred a month after admission. P.M.—Growth had apparently started in the lung and infiltrated the left upper and upper part of the left lower lobes. Secondary deposits in bladder, left ventricle of the heart, thyroid, stomach and right centrum ovale. Numerous stones in gall-bladder which was free from growth, as also was the liver. Examination of growth showed it to be a spindle-celled sarcoma.

44. Respiratory, Various.

(*a*) *Female, æt.* 32. An old St. Thomas's nurse. Was an in-patient just over a year, during which she had numerous very severe attacks of asthma and bronchitis. Every kind of treatment was tried in turn, including intra-tracheal injections of creosote, cauterisation of the nasal septum, chloroform inhalations, Tucker's asthma cure, and an autogenous vaccine (streptococcus grown from the sputum). No one remedy was very effectual, though the intra-tracheal injections seemed to help to ward off the attacks. After being free from any attack for 2 months, she was discharged, but soon had an attack which was fatal.

(*b*) *Female, æt.* 30. Three years ago while in New Zealand had pain in the right side of the chest lasting a month and gradually subsiding. In 1913 had a hydatid cyst removed from the left breast in this hospital. Readmitted with signs of fluid in the right side of the chest. X-ray report: "Cyst, not typical of hydatid." Hydatid complement fixation and precipitin reaction both negative. Leucocytes 6600, 7·5 per cent. eosinophiles. Five ribs were resected, and the cyst, which turned out to be a hydatid, was excised. Discharged cured.

(*c*) (1) *Male, æt.* 30. A labourer at Doulton's. Cough for one year. Much sputum. No hæmoptysis. Moist sounds all over chest. Pneumococci in sputum. Improved somewhat and was discharged only to be readmitted 2 months later. Pneumococci still present. P.M.—Very tough pleural adhesions completely surrounded both lungs. On section both lungs showed large masses of a dark green material, apparently fibrous tissue with patches of normal lung between them: the whole appearance of the lung suggested a piece of marble.

(2) *Male, æt.* 4. Previous history: Bronchitis. Latterly abdomen had increased in size. Ascites. Liver enlarged and hard, spleen not palpable, but eventually became so. Metallic cough. Wassermann negative. Abdomen tapped 13 times. Glands made their appearance in both axillæ and right side of neck. Discharged a year after admission and died a fortnight later. P.M.—Universally adherent pericardium. The tissues around the pericardium were transformed into a large mass of fibrous tissue. A few caseous glands at each lung root. No endocarditis. Cardiac lungs. Nutmeg liver which was glued to the diaphragm. Portal vein contained fluid blood. Microscopical report: Pericardium, "chronic tuberculous inflammation"; liver adhesion, "chronic inflammation"; axillary gland, "tuberculous."

DISEASES OF THE CIRCULATORY SYSTEM.

45. Aneurysm.

Nineteen cases, of which 18 involved the aorta and the remaining 1 (the only case occurring in a woman) was an innominate aneurysm. The latter had no treatment except potassium iodide. Wassermann reaction positive in the 11 cases where the test was applied. In 2 others there was a definite history of syphilis, and in 1 other, extensive syphilitic aortitis was found at the autopsy. When a definite history of syphilis was obtained the onset of the present symptoms varied from 39 to 18 years after infection. Hæmoptysis occurred in 2 cases; clubbing of the fingers, 2; pleural effusion, 1; tracheal tug, 8; anginal attacks, 5; dysphagia, 2; pressure on superior vena cava, 2; hyperæsthesia of chest wall, 2; paralysis of left vocal cord, 5; of right vocal cord, 1. In 1 case no pulsation could be felt in the abdominal aorta. Diagnosis confirmed in 12 out of 16 of the cases of aortic aneurysm and in 1 other the aneurysm was pointing. The length of history varied between 3 months and 5 years. Three of the non-fatal and 1 of the fatal cases were readmissions. The arch of the aorta was affected in 11 cases: the first part of the aorta in 4; arch and descending aorta in 1; ascending transverse and descending aorta in 1.

Cases of interest.

(1) *Male, æt.* 40. Pain in left shoulder for 11 months. Syphilis denied. No murmurs or visible pulsation. Aneurysmal 2nd sound. Tracheal tug. Hyperæsthesia on left side over the area supplied by the 2nd to the 6th dorsal roots. Wassermann positive. X rays revealed an aneurysm of the arch and descending aorta.

(2) *Male, æt.* 57. Syphilis many years ago. Thoracic pain for 2 years. Large hæmoptysis 7 weeks ago. Pulsation to the right of the sternum. Fingers clubbed to an extreme degree, and this had been noticed by the patient for the last 10 years. Very little dyspnœa. X rays showed the presence of an enormous aneurysm involving the ascending, transverse, and part of the descending aorta.

46. Aortic Disease.

Eleven cases, 2 fatal. Aortic regurgitation in 10; stenosis in 1. Past history of syphilis in 1; another had a positive Wassermann, and a third showed syphilitic aortitis at the autopsy. In the case of aortic stenosis, the Wassermann reaction was negative. Three had had rheumatism, 1 had had rheumatic fever once, and another 3 times. Clubbing of fingers noted in 1 case; rheumatic nodules in 2; anginal attacks in 2. In 1 case the pericardium was probably adherent. Both the fatal cases died suddenly and one of them had extensive syphilitic scarring of the aorta.

47. Arteriosclerosis.

Five cases. Past history of syphilis in 1; of alcohol in 1. In 1 case where syphilis was denied the Wassermann reaction was negative.

48. Ulcerative Endocarditis.

Thirteen cases, 12 fatal, and 1 was sent to home for the dying. Six cases had a history of acute rheumatism, 3 having had 1 attack, 2 had had 3 attacks, and 1 10 attacks. Two others had suffered from sub-acute rheumatism, and 1

man had had syphilis. Three cases were moribund on admission and no systematic investigation was possible. Blood-cultures were done in 6 of the remaining 10 cases: in 3 a streptococcus was grown; in 1, *Staphylococcus albus*; in 2, the cultures were sterile. Profuse sweating noted in 7 cases; spleen palpable in 10; rigors in 3; embolic hemiplegia in 1; hæmatemesis in 1; hæmaturia in 3; hæmoptysis in 2; clubbing of fingers in 1; purpura in 1. Leucocyte count done in 4 cases; number varied from 4620 to 12,600.

Complications.—Infarcts in spleen in 9 cases; in brain, 2; in kidney, 4; in peripheral vessels, 2. Intra-splenic abscess in 1; pericarditis in 1; adherent pericardium in 2; cirrhosis of liver in 1; coarctation of aorta in 1; pneumococcal leptomeningitis in 1.

Valves affected: Aortic in 3; mitral in 5; mitral and aortic in 5.

Three cases were treated with autogenous vaccines, without any benefit being obvious, and 1 of these also had 4 intravenous injections of electrargol.

Cases of interest.

(1) *Male, æt.* $2\frac{6}{12}$. Injury to head a week ago, followed by rigor and irritability. Moribund on admission. Diagnosed during life as tuberculous meningitis. P.M.—Malignant endocarditis of mitral valve. Extensive suppurative leptomeningitis involving both base and vertex to an equal degree. A little recent mucopus in each ear. Pneumococcus grown from a culture of the cerebro-spinal fluid diplococci found in the vegetation.

(2) *Male, æt.* 38. Rheumatic fever 10 weeks ago and recently had severe præcordial pain. Sweating profusely. Small left-sided effusion. A few c.c. aspirated: sanguineous; cultures sterile; small lymphocytes 69 per cent.; polynuclear cells 29 per cent.; endothelial cells 2 per cent. Heart was enlarged and a systolic murmur heard at all areas with an occasional presystolic murmur at the apex. An atypical streptococcus was grown from the blood. Spleen at first not felt, but became palpable later on. Remittent pyrexia. Had one rigor. A musical aortic diastolic murmur was heard a few weeks after admission. Seven injections of an autogenous vaccine and 4 intravenous injections of electrargol had no effect at all. Death occurred 3½ months after admission. P.M.—Much destruction of aortic valves. Mitral and tricuspid healthy, but stretched. Coarctation of aorta. Large abscess and several old infarcts in the spleen. Chronic mixed nephritis.

Male, æt. 37. Previous history: Three attacks of acute rheumatism. Bright blood in small amounts had been passed almost daily after each action of the bowels. Occasional epistaxis. Gums oozing for the last 5 weeks. No purpuric rash. Systolic and presystolic murmurs at the apex, and a double murmur over the aortic cartilage. Spleen and liver both down to the level of the umbilicus. No enlarged glands. Supposed to be a case of leukæmia, but the blood examination negatived this diagnosis. Red cells 3,625,000, hæmoglobin 60 per cent., colour index 0·8, leucocytes 4620, of which 48 per cent. were small lymphocytes. Wassermann reaction negative. Blood cultures sterile. Remittent pyrexia. The spleen increased in size, but apart from this there was little change noticed until 6 months after admission he suddenly became comatose and died. P.M.—Large subdural hæmorrhage on the left side. Pons surrounded by blood clot. Bleeding-point not found. The aortic and mitral valves were both thickened from old disease, and both were ulcerated as a result of malignant endocarditis. Nutmeg liver. Spleen weighed 36 ounces and contained 3 white infarcts.

49. Gangrene.

Diabetic gangrene, 2. Gangrene of foot in both cases. Amputation through the lower third of the thigh. Both recovered.

Senile gangrene, 8. Gangrene of toes or foot in all cases. Glycosuria in 2. Amputation through the lower third of the thigh was performed in 6, and of these 2 died.

50. Mitral Disease.

Fifty-four cases, 5 fatal. Regurgitation, 12; stenosis, 11; double mitral, 19; mitral regurgitation and acquired pulmonary stenosis, 1; mitral stenosis and tricuspid stenosis, 1. Nine of the cases of stenosis were in females. Previous history of acute rheumatism in 24, of whom 4 had had 2 attacks, and 2 had had 3 attacks. Subacute rheumatism or chronic rheumatism in 11; chorea in 4; growing pains and recurring tonsillitis in 2; growing pains only in 1; pericarditis in 1. Complications: Ascites in 4; hæmoptysis in 4; hemiplegia in 2; pericarditis in 3; chorea in 2; pregnancy in 1; cirrhosis of liver in 1; nodules in 3; acute rheumatism in 2; renal calculus in 1. In 11 cases an electro-cardiogram was taken. Auricular fibrillation present in 7; 3 of these had mitral stenosis, 3 had a double murmur, and 1 was a case of simple regurgitation. In 1 case of mitral stenosis the electro-cardiogram was normal. 2:1 heart-block was found in a case of mitral regurgitation, and partial heart-block in a case of double mitral disease. In 1 case of mitral stenosis the irregularity was due to premature contractions. Fourteen of the cases were readmissions.

51. Mitral and Aortic Disease.

Twelve cases, 4 fatal. Mitral stenosis and aortic regurgitation in 2; mitral stenosis and aortic stenosis in 1; aortic mitral and tricuspid disease in 1. Past history of 1 attack of acute rheumatism in 4; of 2 attacks in 1; of 3 attacks in 3; of 7 attacks in 1. One other case had had 2 attacks of chorea, and another a history of chronic rheumatism.

Complications.—Pneumonia, 1; facial erysipelas, 1; gastric ulcer, 1; hæmoptysis, 1. An electro-cardiogram in 2 cases of aortic and mitral regurgitation showed the presence of auricular fibrillation; in 1 other case the only abnormality was right ventricular preponderance. Wassermann negative in 1, and in the only case where a history of syphilis was obtained, there was no evidence of it at the autopsy.

52. Myocarditis.

Eight non-fatal cases. History of gout in 2; acute rheumatism in 1. Complications: Ascites in 1; chronic nephritis in 1; pleural effusion in 1; mental disturbance in 1. In 2 cases an electro-cardiogram was taken. In 1 of these cases auricular fibrillation was present, and in the other it revealed a lesion of the right branch of the bundle of His and premature beats arising in the right ventricle. Wassermann reaction negative in the only 2 cases where the test was applied.

53. Pericarditis.

Fifteen cases, 8 of them fatal. Past history of rheumatism in 6; of chorea in 1; recurring tonsillitis and growing pains in 1; severe growing pains only in 1. In 1 case there was a history of pericarditis 5 years ago, and this patient had

definite signs of an adherent pericardium. One girl had recently had pneumonia. One man had a history of syphilis, but the Wassermann reaction was negative. In 5 of the 8 fatal cases no endocarditis was present; mitral stenosis with recent mitral and aortic endocarditis in 1; no P.M. in 2, but 1 of these had well-marked aortic disease.

Complications.—Chronic nephritis and uræmia in 1; acute rheumatism in 1; pleural effusion in 1; ichthyosis in 1; empyema in 2; pneumonia in 1; rheumatic nodules in 1.

Cases of interest.

(1) *Male, æt.* 17. Past history of winter coughs. Increasing dyspnœa for 2 weeks. Extremely anæmic. Large pericardial effusion. No rub. Part of 4th rib was resected and over a pint of hæmorrhagic effusion removed; drainage effected by 2 tubes. Tubercle bacilli and numerous small lymphocytes found in the effusion. Died 15 days after admission. P.M.—A pint of brownish serum in left pleura. Recent grey tubercles scattered throughout both lungs. Caseating mediastinal glands. Both layers of the pericardium were thickened and caseous on section.

(2) *Male, æt.* 18. Præcordial pain for the last month. Well-marked pericardial rub. Ten days later developed uræmia. Decapsulation of both kidneys performed, but death occurred shortly afterwards. P.M.—Shaggy heart: 12 ounces of bloody fluid in the pericardium; contracted granular white kidneys measuring 1½ inches in length.

(3) *Male, æt.* 55. History of vague pains and malaise for the last 6 weeks. Small left-sided pleural effusion, which contained polynuclear cells and was sterile. Tic-tac heart. Pericarditis unsuspected during life. Sudden death. P.M.—Pericardium very much thickened with fibrin which was almost as soft as butter; microscopically "caseous tuberculosis of pericardium." Apical scars and caseous nodules. Fluid in both pleuræ.

(4) *Female, æt.* $2\frac{9}{12}$. A sister has been in recently for pericarditis. Pericardial rub. Great pain apparently on swallowing. P.M.—Heart slightly shaggy. No endocarditis. Imperfectly resolved pneumonia affecting nearly the whole of both lungs. Small empyema between the right lung and pericardium.

54. Varicocele.

No operation in 4; varicose veins, 3; hydrocele, 1; inguinal hernia, 1.

55. Varicose Veins.

No operation in 10; varicocele, 2; gonorrhœa, 1; pes planus, 1; hæmorrhoids, 1. Bilateral, 43.

Fatal case.—Male, æt. 57. Suffering from varicose veins and hæmorrhoids. Trendelenburg's operation was performed together with local excision, and the hæmorrhoids were ligatured at the same time. After operation, the patient developed bronchitis and died on the 18th day. P.M.—R. pleura universally adherent; fatty heart and liver. Signs indicative of chronic alcoholism.

56. Thrombosis and Phlebitis.

Eleven cases. Left femoral in 4; both femorals in 4; right femoral and right brachial in 1; left femoral and right popliteal in 1; multiple thrombosis in 1.

Case of interest.—Female, æt. 16. Father died of thrombosis of legs, and 1

sister has recurrent attacks of thrombosis. Three weeks ago thrombosis started in the left calf, and was soon followed by a similar condition in the right calf. This spread upwards, and on admission there was right femoral and left popliteal thrombosis, and in addition a small thrombosed vein at the angle of the mouth was seen. Heart normal. Liver not felt, but the dulness started at the level of the 4th rib in the nipple line. Spleen not felt. No ascites. A few days later the right side of the chest-wall and the lower half of the trunk became œdematous, and the respiration was 28. Potassium citrate was given in full doses, and had the effect of gradually relieving the symptoms, accompanied by a diminution in the amount of thrombosis. Discharged cured 7 weeks after admission.

57. Congenital Heart Disease.

Four non-fatal cases. One was possibly a case of patent ductus arteriosus; 1 was a doubtful case of pulmonary stenosis; another child, æt. $\frac{3}{12}$, had a loud apical systolic murmur conducted all over the chest, and was not diagnosed exactly. The remaining case, a man, æt. 23, had congenital aortic disease. Fingers showed clubbing. No polycythæmia.

58. Circulatory, Various.

(*a*) Tachycardia.

Nine cases. In 2 cases the symptoms followed influenza: in 1, enteric; 1 gave a history of syphilis and another had had slight rheumatism. The only electro-cardiogram in this series showed right ventricular hypertrophy.

(*b*) Raynaud's Disease.

Four cases. Hands affected in 3, and hands and ears in 1. Wassermann reaction positive in 1 and negative in 1.

Male, æt. 39. Syphilis in 1895. History of 2 years' duration starting with sudden pallor followed by cyanosis left hand, and slighter but similar changes in right hand. Ears affected later. Numerous attacks since the onset. Definite loss of substance in both pinnæ. Radial artery thickened. Coagulation time of blood 1 minute 44 seconds. Hæmolysis with 0·45 per cent. NaCl. Wassermann positive in both blood and cerebro-spinal fluid. Noguchi positive. Lymphocytosis present. Had ·6 grms. neo-salvarsan intravenously and intrathecally, and mercury and iodide by mouth. Great improvement.

(*b*) Ruptured Aortic Valve.

Male, æt. 57. Sudden dyspnœa, but no pain, while carrying a heavy weight a fortnight ago. No history of syphilis. Aortic systolic, and very loud booming and musical diastolic murmur. Water-hammer pulse. Systolic thrill over the base.

(*d*) Polycythæmia.

Male, æt. 57. Spleen said to be enlarged 7 years ago. Perforated gastric ulcer 1911. During last year suffered from Raynaud's disease. Spleen and liver both slightly enlarged. Radial artery thickened. Blood-pressure 122 mm. Wassermann negative. Red cells 7,250,000. Hæmoglobin 110 per cent. Leucocytes not determined. Fingers occasionally painful and cyanosed. Heart sounds normal. Improved with potassium iodide.

(*e*) Unclassified.

Dilated heart, 2; cardiac neurosis, 3; sinus arrhythmia, 1; auricular fibrillation shown by electro-cardiogram in 1 case where no murmurs were present.

Angina pectoris in 1 man who had suffered from plumbism: Wassermann reaction negative.

There was 1 case of Stokes-Adam's disease.

Male, æt. 62. For the last year had suffered from attacks of giddiness and momentary loss of consciousness. Pulse varied between 32 and 40. Wassermann reaction positive. Electro-cardiogram showed complete heart-block. Improved somewhat with mercurial inunctions, but the pulse was unaltered in rate.

DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUES.

59. Cysts (Skin and Subcutaneous).

(*a*) Dermoid Cysts.—Coccygeal, 1; cervical, 1.

(*b*) Sebaceous Cysts.—Scalp, 1; face, 2.

(*c*) Various.—Cyst of deltoid region (probably thrombosed cephalic vein), 1; congenital subcutaneous cyst over scapula, 1.

60. Tumours (Skin and Subcutaneous).

(*a*) Carcinoma.—Face, 1; scrotum, 2; penis, 1.

Fatal case.—Male, æt. 82. Penis almost completely destroyed by epithelioma. Obstruction to outflow of urine. Died uræmic. P.M.—Cystitis and nephritis.

(*b*) Sarcoma.—Melanotic sarcoma of index, 1; pigmented fibro-sarcoma of neck, 1; spindle-celled sarcoma of face, 1; round-celled sarcoma of foot, 1.

(*c*) Rodent Ulcer.—In 1 case the disease could only be removed in part, as it involved the ethmoid; the remainder being subjected to radium.

(*d*) Endothelioma.—Scalp, 2; axilla, 1; myxo-endothelioma of neck, 1.

(*e*) Papilloma.—Thigh, 1; leg, 1; perinæum, 1; penis, 1.

(*f*) Lipoma.—Neck, 4; back, 2; shoulder, 4; abdominal wall, 1; groin, 1; buttock, 1; thigh, 4; fibro-lipoma of buttock, 1; fibro-lipoma of knee, 1; nævo-lipoma of thigh, 1.

(*g*) Fibroma.—Back, 1; back and thigh, 1; buttock, 1; knee, 1; abdominal wall, 1; arm, 1.

(*h*) Angioma.—Lip, 1; lip and thigh, 1; scalp, 1; neck, 1; chest-wall, 1 penis and scrotum, 1; leg, 1; arm, 1; hand, 1.

(*i*) Lymphangioma.—Scrotum, 1.

Ulcers.

(*a*) Chronic Ulcer, 3; curetted, 1.

(*b*) Varicose Ulcer, 1; excised.

(*c*) Gummatous Ulcer, 3—scrotum, 1; breast, 1; groin, 1.

(*d*) Tuberculous Ulcer, 2; both on the neck. Curetted, 1.

(*e*) Bazin's Disease, 2; treated by X rays, 1.

62. Skin Diseases (Various).

(*a*) Tuberculoma.—Face, 1; chest wall, 2; hand, 2.

(*d*) Various.—Hæmatoma of leg, 1; coccygeal granuloma, 1; perinæal granuloma, 1; corns, 1; sclerodermia, 1; erythema nodosum, 1; cow-pox, 1;

herpes zoster, 3; alopecia, 1; septic dermatitis, 9; scabies, 1; sycosis, 2; psoriasis, 1; trophic lesions of hands, 1.

DISEASES OF THE DIGESTIVE SYSTEM.

63. Diseases of the Mouth and Pharynx.

(*a*) Inflammatory Conditions.—Acute stomatitis, 1; pharyngitis, 3; syphilis, 3 (gummatous ulcer of palate, 2; gummatous pharyngitis, 1; all had salvarsan); granuloma of palate, 1.

(*b*) Simple Tumours.—Ranula, 4; epulis, 3; endothelioma of palate, 1; papilloma of palate, 1; papilloma of cheek, 1; fibroma of jaw, 1. Readmitted, 1; also tuberculous abscess of neck, 1.

(*c*) Malignant Tumours.

(i) *Mouth.*—Carcinoma of floor of mouth, 14; radical operations were performed in 8 cases, with 2 deaths. Radium was employed in 8 cases. Readmitted, 3.

Cases of interest.

Male, æt. 54. Epithelioma of floor of mouth in the middle line in front of the tongue. Intra-buccal removal necessitating ligature of both lingual arteries. After operation the tip of the tongue sloughed. Discharged 16th day.

Male, æt. 56. Epithelioma of floor of mouth on right side, spreading on to the alveolus. Laryngotomy and excision of growth and glands together with an inch of the mandible. Death occurred suddenly, two days later. P.M.—Atheroma of coronary arteries—cardiac failure. The suprarenals showed hypertrophy of the medulla.

Male, æt. 53. Epithelioma of floor of mouth in its anterior part. Tracheotomy and excision of growth and glands. Death took place two days later. P.M.—Pulmonary embolism.

Epithelioma of cheek, 2. Both treated with radium; 1 was admitted 3 times.

Recurrent epithelioma of palate, 1. First operation in 1913. Admitted twice for excision of recurrent growths.

Sarcoma of superior maxilla, 1. Treated with radium.

(ii) *Pharynx.*—Carcinoma of pharynx, 5. Radical operations were performed in 2 cases with 1 death.

Fatal case.—Male, æt. 53. Extensive growth originating as an extrinsic carcinoma of the larynx. Tracheotomy, lateral pharyngotomy and exploration. Attempt abandoned. Death from lobar pneumonia 3 days later.

(*d*) Various.—Dental caries, 11; pyorrhœa alveolaris, 5; pharyngeal ulcer (traumatic), 1; sinus of jaw, 4; dental cyst, 3; also tonsillitis, 1.

64. Tonsils and Adenoids.

(*a*) Enlarged Tonsils and Adenoids.—Removal in 57 cases. Also tuberculous adenitis of neck, 2.

(*b*) Tonsillitis.—Tonsils removed in 2 cases. Incision of peri-tonsillar abscess, 1; also secondary syphilis, 1.

(*c*) Tumours of Tonsil.

Male, æt. 29. Fibroma of the tonsil. Tonsil enucleated.

Male, æt. 56. Round-celled sarcoma of tonsil. Excision of growth and glands.

65. Tongue and Lips.

(*a*) Carcinoma of Tongue.—Radical operations were performed in 9 cases, with 1 death. Treatment by radium, 7. Readmitted, 5.

Cases of interest.

Male, æt. 55. A large mass was present far back on the right side of the tongue. Glands were enlarged on the right side of the neck. Excision of growth and glands. The patient was discharged on the 11th day. The growth was found to be an epithelioma, but the glands were tuberculous.

Fatal cases.

Male, æt. 61. Epithelioma of left side of the tongue. Glands considerably enlarged on the left side of the neck, particularly below the angle of the jaw. Preliminary operation, removal of glands. The infiltration of the neck was so extensive that the common as well as the internal and external carotids and jugular vein had to be ligatured and removed. Operation was followed by hemiplegia, and death took place on the following day. P.M.—Syphilitic meningitis over the vertex.

Male, æt. 60. A large growth of the anterior part of the tongue, extending on to both sides; approximate duration, 3 months. Laryngotomy was performed, and the growth removed through the mouth, the tongue being divided as far back as possible. Operation was followed by cellulitis of the neck, and on the 7th day an incision gave exit to a large amount of pus, from which the *Staphylococcus albus* was cultivated. Death took place on the 21st day. P.M.—Septicæmia. Infarction of kidney.

(*b*) Simple Tumours of Tongue.—One case, a congenital lymphangioma of the left half of the tongue causing macroglossia. Partial excision.

(*c*) Tongue, Various.—Syphilitic affections, 8; salvarsan administered in 7 readmitted, 1. Simple ulcer of tongue, 1; excision.

(*d*) Carcinoma of Lips.—Radical operations were performed in 5 cases. Cases of recurrent carcinoma, 4; excision in 3. Radium treatment, 2.

(*e*) Simple Tumours of Lips. Recurrent papilloma, 1; fibromata, 1.

(*f*) Lips, Various.—Chronic ulceration, 2.

66. Œsophagus.

(*a*) Carcinoma.—Treated by radium, 9; readmissions, 8.

Fatal cases.—All males. Broncho-œsophageal fistula, 1; erosion of thoracic aorta, 1; peritonitis after gastrostomy, 1; pneumonia, 3; secondary growths, 2.

(*b*) Simple Stricture, 1.

Female, æt. 18. Previously admitted in 1912, with hydrochloric acid poisoning. Readmitted with dysphagia 10 months later, when œsophagoscopy showed a simple stricture at the level of the cricoid cartilage; bougies failed to pass, and gastrostomy was performed. Third admission, October, 1913. On October 24th, the cervical œsophagus was explored, and the strictured portion excised; a broad skin flap was turned in and rolled upon itself so as to form a new œsophageal segment. On November 11th, the base of the flap was divided, and the incision closed. The bare area on the front of the neck was grafted on November 20th. When healing had taken place, œsophagoscopy showed that the operation had been successful as regards achievement of the desired result, but unfortunately a second stricture was discovered in the thoracic portion of the œsophagus. The cervical wound did not heal completely, but continued to discharge a slight amount of sero-

purulent fluid. On December 8th, 1913, the patient developed an attack of acute appendicitis, for which the appendix was removed. The girl was discharged on January 31st, 1914, but as the wound in the neck showed no improvement, she was readmitted in May, and the skin flap was removed, after which the wound healed.

67. Stomach.

(*a*) Gastric Ulcer.—37 cases, of which 3 were fatal. 30 of the cases were in males. 4 had hæmatemesis in hospital and 9 others had melæna. Of the remaining cases 4 had a history of hæmatemesis before admission, and 1 of melæna. 6 were readmissions and 3 of them had had a gastro-enterostomy performed when first admitted. Test meal in 4 cases: HCl present and lactic acid absent in 3; absence of both acids in 1.

Treatment.—Posterior gastro-enterostomy in 6: Roux's gastro-enterostomy in 1; pylorectomy in 1; gastrostomy, appendicectomy and pyloric intubation in 1. 3 of the cases which were operated upon had pyloric stenosis.

Fatal cases.

(1) *Male, æt.* 40, died from hæmorrhage due to repeated hæmatemeses. P.M.—Very old chronic ulcer near the pylorus, in the centre of which was an eroded vessel

(2) *Female, æt.* 53. Gastro-enterostomy in 1907 for a chronic ulcer on the lesser curvature. Recurrence of pain for the last year. Pylorectomy, followed by death from shock.

(3) *Female, æt.* 59. "Indigestion" for 4 months. Two large hæmatemeses shortly before admission. Melæna in ward. Died a week later unoperated upon. P.M.—Two small apposed ulcers midway between the cardia and pylorus, and another at the beginning of the pyloric canal. Small eroded vessel in the base of one of the ulcers.

(*b*) Perforated Ulcer.

There were 17 cases, in 3 of which no operation was performed. Of the 14 cases operated upon, 10 recovered and 4 died. The perforation was closed in all, either by suture or by omental grafting.

Mortality 28·59 per cent.

Situation.—Pyloric, 9 (2 deaths); lesser curvature, 5 (2 deaths).

Length of history.—Recoveries.—3, 4, 5, 6, 6, 7, 12, 12, 12, 48 hours. *Fatals.*—6, 10, 10, 12 hours.

Treatment of peritoneum.—

	Recovered.	Died.
Irrigation and drainage	4	0
Irrigation and suture	1	0
Dry sponging and drainage	2	2
Dry sponging and suture	3	2

Gastro-jejunostomy was performed in 2 cases, and both recovered.

Drainage of subphrenic abscess was required in 3 cases, and all recovered; in one of these a residual abdominal abscess was also incised.

Causes of death.—General peritonitis in all, pneumonia and phthisis also in 1.

(*c*) Carcinoma.

48 cases, 13 of which were fatal. A test-meal was given in 20 cases. Free HCl but no lactic acid in 5; no HCl and no lactic acid in 7; no HCl but lactic acid present in 8. Hæmatemesis noted in 4; coffee-grounds vomited in 3; blood in fæces in 1; enlarged left cervical glands in 4; hour-glass stomach in

1; epigastric mass noted in 21 cases, three of which were fatal. Ascites in 2. Exploratory laparotomy performed in 9 cases, of which 1 was fatal; inoperable growth present in all cases. Posterior gastro-enterostomy in 9 cases, 1 of which ended fatally. Five other fatal cases were operated upon; jejunostomy in 1; ileostomy in 1; partial gastrectomy in 1; gastrostomy in 1; anterior gastro-enterostomy and cauterisation of ulcer in 1.

Complications.—In the non-fatal cases: Mitral and aortic disease in 1; cerebral thrombosis in 1. In the fatal cases: Post-operative hæmatemesis in 3; broncho-pneumonia in 1; lobar pneumonia in 1; general peritonitis in 1.

All fatal cases were confirmed at the autopsy, and 7 of these were examined microscopically.

Cases of interest.

(1) *Male, æt.* 27. History of severe diarrhœa and vomiting for 8 months and during the last 4 months of pain coming on 2 hours after meals. Mass in epigastrium and some hard discrete glands in the left supraclavicular fossa. Free HCl and lactic acid were both absent in a test-meal. A cervical gland was excised and on section found to be carcinomatous. Posterior gastro enterostomy was followed by slight improvement in the general condition.

(2) *Male, æt.* 56. Always suffered from dyspepsia; pain worse the last 7 months. Fit 6 months ago with loss of consciousness and followed by weakness in the left hand. Large epigastric mass. Enlarged cervical and axillary glands. Lactic acid present. HCl absent. Knee-jerks absent. Pupils unequal but active. Diagnosed as tabes during life. P.M.—Large pyloric growth. Lymphatic dissemination. No areas of softening or disease in the brain or cord. Reported as "spheroidal-celled carcinoma."

(3) *Male, æt.* 55. No history of syphilis. Had pain in left hypochondrium and back for 2 years, with numerous hæmatemeses and melæna. Spleen palpable and soft. Retention of urine. Pupils inactive. All jerks present. Plantars flexor. No loss of sense of position. Discharged after 5 weeks of careful dieting, with the diagnosis of tabes and gastric ulcer. Readmitted 4½ months later just after a large hæmatemesis. Wassermann reaction positive. Signs of disease in C.N.S. unaltered. Died a fortnight later after further hæmatemeses. P.M.—Chronic ulcer on lesser curvature; microscopically definite carcinomatous changes were taking place in it. No degeneration was found in any part of the cord.

(*d*) Dilatation.

Two non-fatal cases in males, both *æt.* 40. Laparotomy performed in one where X rays suggested a bilocular stomach, but only an atonic dilated viscus was found. Nothing further was done. The other case had had a gastro-enterostomy done here 7 years ago for an atonic and dilated stomach. The operation had failed to relieve the pain which he complained of. The old gastro-enterostomy was closed, and the patient was discharged fairly well and with much less pain after food.

(*e*) Various.

Pyloric stenosis, 15. Stenosis due to cicatrisation of ulcers or perigastric adhesions. Readmitted, 1.

Gastro-jejunostomy was performed in 14, and digital dilatation of the pylorus in 1. Adhesions were also divided in 3.

Hour-glass stomach, 7. Cicatrisation of ulcers, 4; adhesions, 3. Readmitted, 1.

Gastro-jejunostomy in 5 (gastro-gastrostomy also in 1), gastro-gastrostomy in 1, adhesions divided in 1.

Gastroptosis, 3. Readmitted, 1.

Gastric pain, 2. Gastro-jejunostomy—appendicectomy in 1.

Old gastric ulcer, 4. In 2 of these, gastro-jejunostomy had been performed previously, and a further anastomosis was made.

68. Duodenum.

(*a*) Ulcer.

32 cases, 5 of them fatal. Past history of hæmatemesis noted in 10 cases, of melæna in 2 others, and coffee-grounds vomiting in 3. In 1 other case a little blood was found in the stools. Test-meal was given in 5 cases; free HCl but no lactic acid in 3, absence of both acids in 2.

Treatment.—Posterior gastro-enterostomy in 9 non-fatal and 2 fatal cases; anterior gastro-enterostomy and appendicectomy in 1; suture of perforated duodenal ulcer, gastro- and cholecystenterostomy in 1.

Causes of death.—Hæmatemesis in 2; gastro-colic fistula in 1; shock following operation in 1; pulmonary tuberculosis and chronic nephritis in 1.

Cases of interest.

(1) *Female, æt.* 47. Became "jaundiced" 11 weeks ago and suffered from vomiting, faintness, and palpitation. No pain. These symptoms passed off gradually, but returned 3 weeks ago. Lemon-yellow skin; no true jaundice. Liver and spleen not felt. Very anæmic. Red cells numbered 1,650,000, hæmoglobin, 16 per cent.; colour index, 0·5; leucocytes, 39,080, 86·5 per cent. being polymorphonuclear cells. Five microblasts and 2 normoblasts were counted. Three days after admission she vomited 6 ounces of blood, and this was followed by melæna. Diagnosis during life, pernicious anæmia. P.M.—Dense adhesions between stomach, duodenum, pancreas, and liver, which had constricted the common bile-duct but had not occluded it. Portal vein could be traced down to the mass of scar-tissue, but below appeared to be represented by the splenic branch only. Small duodenal ulcer was the source of the hæmorrhage, and it was thought that the scar tissue had probably arisen in connection with an ulcer. No free-iron reaction given by liver, spleen, or kidneys.

(2) *Male, æt.* 40. Gastro-enterostomy for pyloric stenosis, 1910. Remained perfectly well till 10 weeks ago. Then diarrhœa started; stools frothy, light, and very offensive. Total fats, 47·9 per cent.; neutral fat, 20 per cent.; fatty acids, 27·9 per cent. This was supposed to indicate a disturbance in pancreatic digestion. Shortly after admission vomiting began of an extremely offensive nature, and the patient wasted very rapidly. P.M.—The gastric stroma of the old anastomosis was the size of a shilling, and led into the jejunum. Transverse colon also found to communicate with the jejunum and stomach, presumably the result of a jejunal ulcer spreading from the margin of the gastro-enterostomy and opening into the colon. No recent jejunal ulceration. Pancreas healthy. The pyloric stenosis was due to the cicatrisation of an old duodenal ulcer.

(3) *Male, æt.* 57. History of attacks of biliary colic, jaundice, and pyrosis for the last 10 years. Good health and no dyspepsia in the intervals between the attacks. Discharged with the diagnosis of cholelithiasis. Readmitted 7 weeks

later on account of more pain. Jaundiced. Liver and gall-bladder easily felt. The pain was more persistent than formerly, and was rather worse after food. No hunger pain. Laparotomy: gall-bladder distended with bile; no gall-stones. Mass of inflammatory tissue round the pylorus and bile-ducts. A small duodenal ulcer was ruptured during the manipulations and was sutured, and a gastro-enterostomy and cholecystenterostomy performed. Discharged cured a month later.

(*b*) Perforated Ulcer.

There were 17 cases, in 2 of which no operation was performed; both died. Of the 15 cases operated upon, 8 recovered and 7 died; mortality 46·66 per cent. One of the cases which survived operation and was discharged died of hæmatemesis later in the year.

Length of history.—Recoveries: 3, 4, 4, 6, 8, 12, 20, 24 hours. *Fatal:* 9, 24, 24, 34, 48, 72, ? hours.

Treatment of peritoneum.—

	Recovered.	Died.
Irrigation and drainage	1	4
Irrigation and suture	1	1
Dry sponging and drainage	4	1
Dry sponging and suture	2	0
Drainage only, perforation plugged	0	1

Causes of death: general peritonitis in all.

69. Hæmatemesis.

4 cases. 2 were possibly due to a duodenal ulcer.

Girl, æt. 14. Anæmic for the last 6 months. Had 3 hæmatemeses accompanied by fainting during the last week. Epistaxis 3 days ago. Menstruation began a year ago. No purpuric rash. No pains in the joints or abdomen. No history of injury. Spleen not felt.

70. Intestinal, Various.

(*a*) Simple.

(i) Fæcal fistula, 8. *Male, æt.* 29. Had undergone an operation for appendix abscess 9 months previously, and had had a fæcal fistula ever since. Laparotomy was performed and a perforation in the ileum found and closed. Discharged 15th day.

Male, æt. 44. Drainage of right perinephritic abscess 3 months previously, followed by removal of calculi from the right kidney. Admitted with an anterior right hypochondriac wound discharging fæcal matter, and a right loin wound discharging pus, but no urine. Nothing whatever had been passed *per rectum* during the 4 weeks preceding admission. From the nature of the excretion and the position of the wound it was judged that the fistula must communicate with the transverse colon. March 11th, ileo-sigmoidostomy performed, and the ileum partly occluded beyond the anastomosis; result, only very slight improvement. April 2nd, ileum completely divided distal to the anastomosis; result, no change. April 29th, iliac colon completely divided above the anastomosis, thus completely excluding the whole of the colon above that point, together with the cæcum and a few inches of the ileum; result, the fistula ceased to discharge fæcal matter, and the bowels acted normally. Discharged May 4th, the fistula still discharging pus, but no fæcal matter.

Male, æt. 48. Previous admission 1913 for fæcal fistula following appendicectomy. The ileum had been completely divided, both ends implanted into the transverse colon with no improvement. Operation, complete exclusion by division of both afferent and efferent limbs; result, fistula discharged pus, but no fæcal matter. Discharged 35th day.

Female, æt. 58. Fistula since operation for appendix abscess 2 years previously. Fistula dissected out and closed. Wound suppurated and discharged fæcal matter worse than before, but eventually healed.

Female, æt. 58. Drainage of appendix abscess 1913, laparotomy for acute obstruction, January, 1914. Admitted August, 1914, with a fæcal fistula. Fistula dissected out and closed. Wound healed by first intention. Discharged 16th day.

Female, æt. 69. Fistula in the right iliac fossa appeared spontaneously 2 months before admission. Probably due to carcinoma of colon. No operation.

Male, æt. 4. September, 1913, laparotomy for acute obstruction; a strangulated coil of ileum had been removed. Paul's tubes tied into both ends. Admitted with a large ileal fistula near the umbilicus. The skin was in very bad condition. Lateral anastomosis performed between the afferent and efferent loops. Death took place 3 days later.

Female, æt. 45. Vesico-colic fistula, urine containing fæcal matter. Symptoms began 3 years previously after what the patient described as an attack of peritonitis, for which no operation had been performed. Laparotomy: vesico-colic fistula found; adhesions were divided and the vesical apertures sutured. Part of the colon was resected with axial anastomosis. Death on the 6th day. P.M.—Fæcal extravasation and general peritonitis.

(ii) Tuberculoma of transverse colon, 1.

Male, æt. 26. Lateral cæco-sigmoidostomy and appendicectomy. Discharged 15th day.

(iii) Chronic volvulus of pelvic colon, 1.

Female, æt. 48. Six months' history of abdominal pain, vomiting, and constipation. Lateral anastomosis between afferent and efferent loops. Appendicectomy. Discharged 18th day.

(iv) Idiopathic dilatation of colon, 2. Both males, aged 14 and 7 respectively. Laxatives employed in both.

(v) Acute diverticulitis, 1.

Male, æt. 13. Acute abdominal symptoms, 20 hours. Amputation of diverticulum and appendicectomy. Discharged 11th day.

(vi) Enterospasm, 3.

All females, aged 27, 23, 28 respectively. No operation performed.

(vii) Sprue, 1.

Female, æt. 44. Had malaria 6 years previously. Seven months' diarrhœa, but no melæna; stools quite unformed. Tip and sides of tongue sore, abdomen flabby. No amœbæ found in the stools. Treated with emetine, with excellent results.

(viii) Intestinal hæmorrhage, 1.

Female, æt. 26. Had no hæmorrhage while in hospital. No cause found.

(ix) Jejunal ulcer, 1.

Male, æt. 33. Gastro-jejunostomy performed in 1910 for duodenal ulcer. Laparotomy for perforated jejunal ulcer in 1912.

(*b*) Malignant.

(i) Sarcoma of ileum, 1.

Female, æt. 10. Previous admissions in 1912. May, 1912, ileal intussusception, laparotomy and reduction. June, 1912, recurrent intussusception, partial reduction and lateral anastomosis. December, 1913, readmitted with abdominal pain, vomiting, and other signs of intestinal obstruction. Laparotomy. Tumour of ileum found above the coil of ileum which had previously been excluded; resection and axial anastomosis. Large glands present in the mesentery. January, 1914, laparotomy with a view to the removal of mesenteric glands; operation abandoned. The patient was now treated with Coley's fluid as the tumour was reported to be a sarcoma. Discharged February 12th, 1914.

(ii) Carcinoma of colon, 29.

Cæcum, 3; ascending colon, 4; transverse colon, 3; splenic flexure, 2; pelvic colon, 11; doubtful, 6. No operation in 12; incision of abscess, 3; exploratory laparotomy, 3; colostomy, 3; ileo-sigmoidostomy, 3, with 1 death; resection, 5, with 3 deaths. Causes of death—peritonitis in all.

71. Appendicitis, Quiescent.

Previous hysterectomy, 1; previous drainage of appendix abscess, 13; ventral hernia, 2; inguinal hernia, 2; cholelithiasis, 1; ovarian cyst, 2.

Post-operative complications.—Hæmaturia, 1; abscess of abdominal wall, 1; peritonitis, 1; septicæmia, 1.

Readmitted with:—Adhesions, 1; ventral hernia, 1; abdominal pain, 2.

Appendix contained:—Pin and nails, 1; threadworms, 1.

Fatal cases.

Female, æt. 32. Appendicectomy. Appendix pigmented and contained threadworms. Suppuration occurred with spreading cellulitis of the abdominal wall and septicæmia; the pus contained streptococci, diphtheroid bacillus, and B. pyocyaneus.

Female, æt. 28. Appendicectomy was followed by general peritonitis—death took place in 5 days.

72. Appendix Abscess.

Also gummatous meningitis, 1; readmitted with recurrent appendix abscess, 1; readmitted for appendicectomy, 9. Abscess resolved without operation, 5.

Post-operative complications.—Acute obstruction, 1; empyema, 1; fæcal fistula, 2; sub-phrenic abscess, 1; diphtheria, 1; femoral thrombosis, 1.

Fatal cases.—5. Suppurative meningitis, no operation, 1; general peritonitis, 2; retroperitoneal cellulitis, 2.

73. Acute Appendicitis.

Also talipes, 1; salpingitis, 2; sub-acute obstruction, 1; gastric ulcer, 1.

Post-operative complications.—Pneumonia, 1; diphtheria, 1; sub-phrenic abscess, 1; empyema, 3; fæcal fistula, 4; residual abscess, 7; cellulitis of abdominal wall, 2; melæna, 2; secondary hæmorrhage, 1; femoral thrombosis, 1; obstruction, 2.

Results in relation to the interval between onset of attack and time of operation in cases in which the appendix was removed during the acute stage, up to the 7th day.

	Less than 2 days.	2 days.	3 days.	4 days.	5 days.	6 days.	7 days
Recovered	77	45	33	8	2	0	2
Died	0	3	7	5	3	1	1

Causes of death in fatal cases: Cellulitis of abdominal wall and pyæmia, 1; intestinal obstruction, 2; general peritonitis, 17.

74. Colitis.

18 cases, 2 fatal. One of the latter was clinically a case of epidemic diarrhœa and the other had ulcerative colitis.

6 cases of ulcerative colitis. Four had injections of emetine and all were benefited by it. One of these four and another case had a cæcostomy performed, and the colon irrigated, with good results.

There were 5 cases of mucous colitis; one of them had 3 in. of the ileum, the ascending and half the transverse colon removed and an ileo-colostomy performed. Discharged 11 days later; less mucus in stools.

Case of interest.—(1) *Female, æt.* 39. Alternate bouts of diarrhœa and constipation for 2 years. No pain until 18 months ago, and shortly afterwards blood was noticed in the stools for the first time. Continuous diarrhœa with great loss of weight during the last 3 months. *B. coli* and *B. mucous capsulatus* grown from the stools. Cæcostomy and irrigation with albargin resulted in all the weight which had been lost being regained, and the stools became almost normal.

75. Intestinal Obstruction.

(*a*) Simple.

(i) Volvulus, 6. Ileum, 2; pelvic colon, 4.

Female, æt. 49. Twenty-four hours. Laparotomy revealed volvulus of ileum, resection 4 feet and lateral anastomosis. Recovery.

Female, æt. 36. Twenty-four hours. Laparotomy, volvulus of ileum untwisted. Recovery.

Male, æt. 57. Twenty-four hours. Volvulus of iliac and pelvic colon. Laparotomy and resection; drainage of proximal end. Subsequent ileo-colostomy and complete division of ileum below the stoma.

Readmitted with fæcal fistula due to leakage from lower closed end of colon. Excision of fistula and restoration of colon in continuity.

Female, æt. 60. Volvulus of pelvic colon. Laparotomy and transverse colostomy. Died. P.M.—Affected coil enormously dilated but not hypertrophied.

Male, æt. 38. Volvulus of pelvic colon of 7 days' duration. Colostomy. Died. P.M.—General peritonitis; affected coil showed acute and chronic inflammation.

Male, æt. 22. Fourteen years ago had what he called ulceration of the bowels and was ill for 6 months. During the last 2 years, the stools had been loose, small and frequent. Very alcoholic. The abdomen had been swelling for 5 days and no flatus had been passed for 4 days. Laparotomy; enormous volvulus of pelvic colon found. Resection and colostomy. Died. P.M.—Peritonitis.

(ii) Bands, 7; 4 deaths. Following tuberculous peritonitis, 1; appendicitis, 3; salpingitis, 1. No operation in 2, as they were moribund on admission.

(iii) Adhesions, 5; 3 deaths. No operation in 1. Division of adhesions, 2; lateral anastomosis, 1; drainage of bowel, 1.

(iv) Internal strangulation, 1. *Male, æt.* 56. Ileum strangulated through a slit in the omentum. Died.

(v) Rectal stricture, 1. *Female, æt.* 36. Due to cicatricial stenosis after perineorrhaphy 3 years previously. Colostomy. Died.

(vi) Fibroids, 1. Obstruction of colon by large fibroids. Removal of uterus and appendages. Recovery.

(vii) Ileal stricture, 1. Chronic obstruction. Stricture due to an old abdominal injury. Lateral anastomosis. Recovery.

(*b*) Malignant.

Cæcum, 1; ascending colon, 2; transverse colon, 1; splenic flexure, 3; descending colon, 1; pelvic colon, 16; rectum, 7; disseminated growth, 2.

Also enlarged prostate, 1; readmitted with prolapse of colostomy, 2; cellulitis of abdominal wall, 1.

Fatal cases.—Primary resection and anastomosis, 1; primary resection and colostomy, 1; primary anastomosis, 1; primary colostomy, 5; secondary resection and anastomosis, 2. See operation table.

(*c*) Intussusception.

23 cases admitted: 6 fatal. Mortality 26 per cent. Type of intussusception: Entero-colic, 18; enteric, 3; colico-colic, 2. 15 of the cases were in infants under 1 year; 6 others were under 4 years of age, and only 1 case occurred in an adult. 14 of the cases were males. Laparotomy and reduction only in 17; reduction and appendicectomy in 2; resection and axial anastomosis in 2. One case was moribund on admission, and another was not suspected of having an intussusception until it was revealed at the autopsy. No peritonitis found in any of the 6 fatal cases.

Cases of interest.

(1) *Girl, æt.* $7\frac{3}{12}$. Operations for intussusception performed when $5\frac{1}{2}$ and 12 months old. Admitted with a typical history starting 16 hours before admission. Laparotomy and reduction of a pure enteric intussusception performed. Two days later recurrence of symptoms; the abdomen was again opened and another intussusception at the same place and of the same length was reduced. Recovery.

(2) *Female, æt.* 48. Admitted with a 3 days' history of acute obstruction. An intussuscepted polyp of small intestine had caused the obstruction. Three inches of bowel were resected and an axial anastomosis performed. Recovery.

(3) *Male, æt.* $\frac{6}{12}$. Been attending the out-patient department for the last 17 days for diarrhœa and vomiting. Stools green and contained a little blood. The vomiting became more persistent and bilious in character, and just before death was fæcal. The abdomen was distended, no mass was felt, and an intussusception was not suspected. Four stools were passed during the last 24 hours of life. P.M.—Three feet below the duodeno-jejunal flexure was a gangrenous intussusception. The intestine contained altered blood. No general peritonitis.

76. Rectum.

(*a*) Carcinoma.—Recto-vaginal fistula, 1; recto-vesical fistula, 1; ischio-rectal abscess, 1; urethral stricture, 1.

No operation in 15; simple colostomy, 27, with 5 deaths; excision of rectum, 5, with 3 deaths.

Radical operations undertaken.—Kraske, 1; perineal excision, 2 (1 died); abdomino-perineal excision, 2 (both died).

Causes of death.—Recto-vesical fistula and nephritis, 1; after perineal excision, gangrenous cellulitis of pelvic tissues, 1; after abdomino-perineal excision, shock, 1, and peritonitis, 1; after colostomy, peritonitis, 2; pyæmia, 1 tuberculous broncho-pneumonia, 1; no P.M., 1.

(*b*) Simple Stricture.—Due to dysentery, 1; old pelvic cellulitis, 1; doubtful, 1. Colostomy, 2.

(*c*) Prolapse.—Excision, 2; colopexy, 1; no operation, 1.

(*d*) Polypi.—Hæmorrhoids also, 1.

(*e*) Epithelioma of Anus.—Colostomy, 1.

(*f*) Rectal Hæmorrhage.

Female, æt. 48. Had had intermittent hæmorrhage for 3 weeks and was very exhausted. Laparotomy—nothing found. P.M.—No further light thrown upon the case.

(*g*) Various.—Rectal incontinence, 1; perforated ulcer of rectum and urethral stricture, 1.

77. Hæmorrhoids.

Anal fissure, 3; prolapse, 1; rectal abscess, 1; varicocele, 1 varicose veins, 1; pregnancy, 1.

One case of thrombosed prolapsed hæmorrhoids was treated by injection with 5 per cent. carbolic.

78. Fistula and Fissure-in-Ano.

(*a*) Fissure.—Gonorrhœa, 1; urethral stricture, 1; hæmorrhoids, 2; pruritus treated by X rays, 2.

(*b*) Fistula.—Hæmorrhoids, 3; polyp, 1; rectal abscess, 2.

79. Abdominal Pain.

9 were doubtful cases of appendicitis. 5 were probably renal in origin, but in all cases the X-ray report was negative. There was 1 case of lead colic. A normal appendix was removed in 7 cases, and 1 of these also had a cholecystectomy performed, the gall-bladder being very adherent to the liver. Laparotomy performed in 4 other cases. One was supposed to be a perforated gastric ulcer. One had the left kidney exposed, but as palpation failed to find the supposed calculus, nothing further was done. In another case, the only abnormality found was a large liver. One case had had an anterior gastro-jejunostomy performed 11 years ago. Readmitted with gastric pain. Stomach incised and stoma found in good condition. The stomach was merely sutured and the wound closed.

Fatal case.—Female, æt. 49. Laparotomy for supposed acute appendicitis. Nothing abnormal was found. Patient rather collapsed and was infused intra-

venously. The latter wound suppurated, and cellulitis of the arm set in. The hand was incised. A fortnight later thrombosis of the left leg occurred, and the internal saphenous vein was tied. Death from pyæmia 3 weeks after the laparotomy. P.M.—Suppuration in inferior vena cava and left temporal vein. Encysted left empyema. Suppurative arthritis of left knee.

80. Constipation.

20 cases, 14 of them being in females. Normal appendix removed in 1 case. Ileo-colostomy performed in another. Laparotomy for supposed adhesions in a woman who had had her appendix removed 3 years ago. *Nil* abnormal found.

Case of interest.—Male, æt. 15. Always been constipated. Bowels usually open once a week. No action for 17 days before admission. Abdomen very distended. Very marked peristalsis seen. Rectum full of fæces. Various enemata resulted in 25 large stools being passed during the next 3 days. X rays showed no dilatation of colon. Bowels open once a day when patient was discharged.

81. Diarrhœa and Dysentery.

11 cases of diarrhœa and 2 of dysentery.

Male, æt. 25. Eighteen months ago treated for dysentery in Shanghai with injections of emetine. Several attacks since. No amœbæ in fæces, but abundant growth of slow lactic fermenting bacilli. Autogenous vaccine and injections of emetine produced a great improvement. Stools practically normal when patient was discharged.

One case of diarrhœa occurred in a man who had pulmonary tuberculosis.

82. Dyspepsia.

44 cases. A test meal was given in 11 cases. Lactic acid but no HCl present in 1. Absence of both acids in 3; HCl present but lactic acid absent in 6; HCl present and also a trace of lactic acid in 1. 2 cases were operated upon; in 1 a kinked but otherwise normal appendix was removed, and in the other the abdominal wound was closed after a negative examination of the stomach and duodenum.

84. Enteritis.

54 cases, 22 of which were fatal. 32 cases of epidemic diarrhœa and vomiting are included under this heading. All of these were in children under 4 years of age, and 21 of them ended fatally. Mortality 65·6 per cent. 9 of the cases were admitted in a moribund condition and died a few hours later.

Case of interest.—Girl, æt. $\frac{5}{12}$. Past history of snuffles and rash, obviously a congenital syphilitic child. Admitted with a history of diarrhœa and vomiting. Meningeal symptoms. Supposed to be a case of syphilitic meningitis. P.M.—No meningitis found.

85. Abdominal, Various.

(*a*) Visceroptosis.—10 cases, 8 of them in women. 4 had an abdominal belt given them. In 1, a kinked, but otherwise normal, appendix was

removed. Laparotomy performed in 2 cases where the only abnormality found was a prolapsed kidney.

(*b*) Abdominal Carcinomatosis.—9 cases, 2 fatal. Laparotomy performed in 1 fatal and 2 non-fatal cases. Ascites in 5, and in one of these the fluid contained a deposit of new growth.

Cases of interest.

(1) *Male, æt.* 39. A readmission. Gastro-jejunostomy for gastric ulcer in 1913. Abdomen now full of fluid. Slightly jaundiced. No epigastric pain since operation. Losing weight. Discharged without any further treatment.

(2) *Female, æt.* 63. Admitted November, 1913. Then had ascites, 18 pints being removed. Liver not felt. Strong history of alcohol. Abdomen soon filled up in spite of intra-peritoneal injections of adrenalin. The diagnosis was cirrhosis of liver. Readmitted 2 months later after being tapped twice since she was discharged. Laparotomy. Diffuse abdominal carcinomatosis proved by microscopy of an excised piece of omentum.

(3) *Male, æt.* 64. History of hæmaturia, pain in right loin and hypochondrium during the last 6 months. Jaundiced for 4 days. Cammidge test C positive. Urine contained albumin and pus. Liver palpable. Died a month later. P.M.—Bile-ducts obstructed by growth. Liver cirrhotic and contained nodules of growth. Microscopical report—spheroidal-celled carcinoma in liver, pancreas, and glands. Kidneys were in a state of chronic mixed nephritis.

(*c*) Abdominal Sarcomatosis.—7 cases, 4 fatal. Laparotomy in all the non-fatal cases. No P.M. in 1 case.

Fatal cases.

(1) *Female, æt.* 57. Abdominal pain, vomiting, and enlargement of the abdomen for 2 months. Palpable glands in both groins and right side of neck. Much wasting. A blood-count showed a moderate degree of secondary anæmia with 3020 leucocytes, the latter being in normal proportions. P.M.—Mediastinal and abdominal glands enlarged. One or two nodules of growth in each lung, liver, spleen, and kidneys. Microscopical report—"sarcoma."

(2) *Male, æt.* $2\frac{1}{12}$. Previous admission 3 months ago for constipation. On readmission the liver was found to be much enlarged, very hard, and the surface and edge were both irregular. Inferior vena caval obstruction. Retention of urine. A few hard discrete glands in the left axilla. P.M.—Large mass of malignant glands had fused with the under surface of the liver and pushed it up. No ascites. No portal or inferior vena caval thrombosis. Nodule of growth as large as a pea in a papillary muscle of the left ventricle. Large nodules of growth in the mesentery and base of bladder. Liver and pancreas were also invaded. This was a spindle-celled sarcoma.

(3) *Male, æt.* $2\frac{5}{12}$. Previous admission 4 months ago for inferior vena caval obstruction. At that time the liver was enlarged and some glands were felt in both iliac fossæ. On readmission, ascites was present, and the abdominal glands were much larger. P.M.—Clear fluid in abdomen. Large masses of growth on each side of the vertebral column, the lumbar and sacral vertebræ being invaded and partially destroyed by it. The inferior vena cava was completely thrombosed, part of the thrombus projecting into the right auricle. Both renal veins thrombosed. Abdominal aorta constricted. Numerous secondary nodules in both lungs. Reported as a round-celled sarcoma.

(*d*) Splenomegaly.—4 non-fatal cases.

(1) *Male, æt.* 51. Discharged himself 2 days after he was admitted. The spleen was greatly enlarged. Leucocytes 20,680, of which 80 per cent. were polynuclear cells. As there was a systolic apical murmur, the provisional diagnosis was ulcerative endocarditis.

(2) *Female, æt.* 64. Tumour below left costal margin which had gradually increased in size during the last 9 months. Blood normal. Wassermann negative.

(3) *Male, æt.* 37. Severe tonsillitis 2 months ago. Soon afterwards had pain in the splenic region. No bleeding. Spleen moderately enlarged. Blood normal. No Wassermann done, and syphilis was denied by the patient.

(4) *Male, æt.* 36. In July, 1912, operation for ventral hernia in Staffordshire Infirmary. Liver then said to be cirrhotic, and spleen enlarged. Nine months ago passed about 2 pints of dark blood *per rectum*. Spleen enormously enlarged. No glands palpable. Thought to be a case of leukæmia before the blood was examined. Red cells 4,556,000, hæmoglobin 90 per cent., colour index 1·0. Leucocytes 8280, 57 per cent. polynuclear cells, 11 per cent. small lymphocytes, 16·4 per cent. large lymphocytes, 1·3 per cent. myelocytes. Wassermann reaction positive. Two injections of neo-salvarsan were given, and mercury and iodide by mouth. Discharged in good health, but the spleen was not materially altered in size.

86. Foreign Bodies in the Intestinal Tract.

Tooth-plate, 1; safety-pin, 2; penny, 1; barrel of toy pistol, 1.

Male, æt. 40. Had swallowed the barrel of a toy pistol, 6 inches long, for the third time. On this occasion it was removed from the duodenum.

DISEASES OF THE DIGESTIVE GLANDS.

87. Salivary Glands.

(*a*) Parotid Tumour.—Myxo-endothelioma, 3; endothelioma, 2; perithelioma 1; chronic parotitis, 2; tubercle of parotid, 1. Also inguinal hernia, 1.

Fatal case.—Male, æt. 8. History: 3 weeks' swelling of left parotid; no pain, no facial paralysis. Excision of parotid. Death took place on the following day. Report: Caseating tubercle.

(*b*) Various.—Salivary calculus, 4; myxo-chondro-endothelioma of sublingual gland, 1; submaxillary adenitis, 1. Also ureteric calculus, 1.

88. Cirrhosis of Liver.

(*a*) Alcoholic.—21 cases, 5 fatal, all the latter being in males. Ascites present in 4 of the fatal and 9 non-fatal cases. All of the former and 7 of the latter were tapped.

Complications.—In the fatal cases: facial erysipelas in 1; ulcerative endocarditis in 1; gastric ulcer and hæmatemesis in 1; coma in 2. One man had a history of syphilis, and all the fatal cases, with the exception of 1 who was admitted in a moribund condition, had a history of alcoholic excess.

In the 16 non-fatal cases there was a definite history of alcoholic excess in 13

liver palpable in 11; spleen palpable in 2; peripheral neuritis in 2; delirium tremens in 1; jaundice in 2. 1 man had a history of syphilis, and 1 patient had a hæmatemesis.

Cases of interest.

(1) *Male, æt.* 40. Admitted in a moribund condition just after a large hæmatemesis. P.M.—Hobnail liver. Bleeding had occurred from a small ulcer just below the cardiac orifice. Small bowel full of blood.

(2) *Male, æt.* 44. Had syphilis when 19. Heavy beer-drinker. Discomfort after food for the last 4 months. Spleen and liver much enlarged. Ascites. Wassermann negative. Red cells 4,093,750, hæmoglobin 60 per cent., colour index 0·7; leucocytes numbered 1320. Apical systolic murmur. The latter was thought to be a hæmic murmur, and a provisional diagnosis of splenic anæmia made. No blood-culture done. Temperature remittent. Much sweating. Paracentesis abdominis performed once. P.M.—Fine-meshed cirrhosis of liver. Spleen was soft, weighed 58 ounces, and contained 2 small infarcts. No portal thrombosis. Both mitral and aortic valves were ulcerated. Cirrhosis confirmed by microscopy The aortic valve was acutely inflamed, and masses of streptococci were found in the vegetations. Considerable fibrosis of sinus walls of spleen; Malpighian corpuscles diminished; endothelial proliferation and giant-cell formation.

(3) *Male, æt.* 39. Had a chancre twice with an interval of 18 months. Heavy beer-drinker. Talma-Morrison operation done here, 1911. The operation was followed a fortnight later by a hæmatemesis, but this was the only occasion on which bleeding had occurred. Since discharge, 2 or 3 glasses of beer daily. No symptoms until 6 weeks ago, when vomiting started. Liver enlarged and very hard. Spleen palpable. Ascites. Abdominal veins prominent. Condition unaltered when discharged.

(*b*) Syphilitic Cirrhosis.—5 cases; 2 fatal.

(1) *Female, æt.* 37. Three weeks' history of swelling of abdomen preceded by œdema of feet and occipital headaches. Almost a teetotaler. Ascites. Heart and urine normal. Von Pirquet positive. Laparotomy was performed and gummata found in the liver, which was cirrhosed. Wassermann reaction positive. Two injections of salvarsan had no obvious effect. Abdomen was tapped twice and filled up rapidly again. Talma-Morrison performed. Patient was tapped 8 times after the second operation. Mercury and potassium iodide by mouth were given for a long time. Patient was discharged 6 months after admission very little better for all her treatment.

(2) *Female, æt.* 38. Six months' history of slight intermittent jaundice and pain over the liver. The liver extended 2½ in. below the costal margin, and the spleen was palpable. Slightly jaundiced. No ascites. Wassermann positive. One injection of neo-salvarsan and mercury by mouth had the effect of relieving the pain and causing the jaundice to disappear.

(3) *Female, æt.* 28. Jaundiced for the last year, during which she had had about 12 attacks of epigastric pain unrelated to food. No vomiting. Deeply jaundiced. Ascites. The abdomen was tapped, and the liver could then be felt an inch below the costal margin. Wassermann reaction positive. Total fat in stools 14·56 per cent., neutral fat 4·05 per cent., fatty acids 10·51 per cent. Patient had numerous attacks of epigastric pain while in hospital. Mercurial inunction and iodide by mouth had the effect of relieving the pain and slightly

diminishing the intensity of the jaundice; patient was discharged, at her own request, still jaundiced and with ascites.

(4) *Male, æt. 2 months.* An obviously syphilitic child, with a rash on the chest, nasal discharge, enlarged veins on the scalp, and enlarged liver and spleen. Died soon after admission. P.M.—Liver greenish and cirrhotic. Portal and biliary vessels pervious. Spleen congested. The lower end of one femur showed syphilitic epiphysitis. Histologically the liver showed a pericellular cirrhosis.

(5) *Male, æt. 4.* Had an acute attack of jaundice 8 weeks ago. This gradually decreased in intensity but never disappeared. A few days before admission the colour deepened. On admission the child was deeply jaundiced, delirious, and vomited persistently. No viscera were palpable. No leucin or tyrosin in the urine. Wassermann positive. Died 2 days later. P.M.—The liver showed numerous large, low, nodular bosses of a pale yellow colour, which projected from its surface. Bile-ducts pervious. Spleen congested. Microscopical report: "The elevations are due to hypertrophy of the individual hepatic cells, which are of extraordinary sizes; the rest of the liver shows a pericellular cirrhosis; scattered areas of acute inflammation in the spleen."

89. Cholelithiasis.

52 cases, 7 fatal. No operation performed, 19; cholecystostomy, 17; cholecystostomy and partial cholecystectomy, 1; cholecystectomy, 5; cholecystostomy and choledochotomy, 6; cholecyst-duodenostomy, 1; choledochostomy, 2.

Fatal cases.—Chronic nephritis and myocarditis, 1; chronic pancreatitis, fat necrosis, general peritonitis, and right empyema, 1; lobar pneumonia, 1; pulmonary embolism, 2; biliary extravasation into the root of the transverse mesocolon, 1. The remaining case was admitted in a moribund condition. P.M.—Chronic cholecystitis, perforation of gall-bladder. Adhesions to the transverse colon.

90. Cholecystitis.

Acute, 2; empyema of gall-bladder, 1.

Female, æt. 20. Pain in right iliac fossa for 2 years; the appendix had been removed without effect. The Cammidge reaction was positive. Laparotomy: a well-defined band was found connecting the gall-bladder to the duodenum. The band was divided and the gall-bladder explored; as no stones were found, the latter was sutured and the abdomen closed. On the third day the abdomen was reopened on account of symptoms of peritonitis; the gall-bladder had evidently leaked, giving rise to spreading peritonitis. The gall-bladder was drained, the peritoneum was cleansed and drained. Death on the same day. P.M.—Peritonitis.

91. Jaundice.

2 cases of catarrhal jaundice, 1 case probably secondary to cirrhosis of liver. 3 cases of acholuric jaundice.

(1) *Female, æt. 26.* A readmission. Jaundiced since 3 months old. Her father was jaundiced a week before he died, otherwise family history negative. Recently had attacks of biliary colic, with shivering, sweating, and deepening of the jaundice. Another attack occurred while she was in hospital. No bile in urine. Liver just palpable and indurated. Spleen reached well below the

anterior superior spine. Fragility of red cells much increased, hæmolysis occurring with 0·8 per cent. NaCl.

(2) *Female, æt.* 27. Previous admission 1913, for movable spleen. No jaundice at that time. A grandmother died in rather early life from "floating abdominal tumour." Mother died from hæmatemesis, and her spleen was found to be enlarged 16 years before death occurred; she had had repeated attacks of jaundice. Father and brother died of phthisis. Eleven years ago movable kidney was diagnosed. Jaundice for the first time 18 months ago, *i.e.* 3 months before her first admission. Recurrence of jaundice with a moderate amount of pain 8 weeks ago. Still slightly jaundiced. Spleen larger and freely mobile. No bile in urine. Wassermann negative. Fragility of red cells much increased, hæmolysis occurring with 0·7 per cent. NaCl. Coagulation time of blood normal. Red cells 4,000,000; hæmoglobin 90 per cent.; colour index 1·1. Leucocytes 10,240, in normal proportions. The spleen was removed; no adhesions found; no post-operative shock. A month later red cells numbered 3,612,500; hæmoglobin 75 per cent.; colour index 1·0. Leucocytes 7800. Hæmolysis now occurred with 0·52 per cent. NaCl. The jaundice rapidly disappeared after the operation, and patient on discharge was entirely free from symptoms.

(3) *Male, æt.* 22. Jaundiced from birth. His mother had also been jaundiced all her life, and on examination was found to have an enlarged spleen. Patient had had 3 attacks of deepening of jaundice accompanied by some pain in splenic region. Last attack 3 days before admission. Deeply jaundiced. No bile in urine. Spleen at the level of the umbilicus. Liver not felt. No bile or urobilin in urine. Wassermann negative. Blood-count showed a slight degree of secondary anæmia with 5040 leucocytes. Hæmolysis occurred with 0·48 per cent. NaCl. Coagulation time of blood slightly increased, but became normal after the administration of calcium chloride given in half dram doses *t.d.s.* for 2 days. Splenectomy was performed. Many adhesions were found and the operation was exceedingly difficult, and was followed by much shock. The jaundice gradually disappeared, and patient was discharged 6 weeks later in fairly good health. There were at that time 17,400 leucocytes. Ten days after operation hæmolysis occurred with 0·55 per cent. NaCl., and a month later with 0·45 per cent. NaCl. A short-chained streptococcus was grown from the spleen. Report on the latter: "Capsule thickened. Scattered fibrosis. Very congested. Abundant iron-free pigment both intra- and extra-cellular. Red cell phagocytosis present but slight. Lymphoid corpuscles small, no activity in centres. Large uni- and multi-nucleated cells numerous.

92. Pancreas.

5 cases of carcinoma of pancreas. Laparotomy in 3 cases, 1 of which was fatal. 1 other case had been previously operated on, a cholecyst-gastrostomy being performed. Hæmatemesis at Swanley, and was readmitted on account of epigastric pain, vomiting and melæna. Total fat in fæces, 79·2 per cent.; neutral, 43·2 per cent.; fatty acid, 36 per cent. The remaining case was in a man, aged 69, who had been jaundiced for 7 weeks, during which time he had lost a stone in weight. No pain or vomiting. Cammidge test C after fer-

mentation positive. Gall-bladder could be felt, and the liver was hard, enlarged, and irregular.

Fatal case.—*Male, æt.* 13. Dyspepsia for 8 months. Biliary colic 3 months ago. Jaundiced for the last week. Subcostal tenderness on the right side. *Nil* palpable. Laparotomy. Nothing found in biliary tract, but head of pancreas enlarged and hard. Cholecystostomy performed. Bile sterile. Operation followed by a streptococcal pyæmia. P.M.—Spheroidal-celled carcinoma of head of pancreas, secondary growths in glands and liver. Pyæmic infarcts in lungs.

Acute Pancreatitis.—3 cases, 2 fatal.

(1) Ileostomy for supposed intestinal obstruction in one of the fatal cases, a man, *æt.* 62; ileum greatly dilated and colon collapsed. P.M.—No obstruction; fat necrosis; pancreatic tissue divided into islets by fat.

(2) *Female, æt.* 39. History of 8 hours' acute epigastric pain and vomiting. Abdomen tender and rigid all over. Dulness in the flanks. Laparotomy. Large amount of hæmorrhagic exudate; tubes put down to head of pancreas and into pelvis. After 8 days of extreme illness and great restlessness patient made a complete recovery.

(3) *Female, æt.* 58. Two days' abdominal pain and vomiting. Abdomen distended and rigid all over. Fat necrosis found at the laparotomy. Peritoneum was drained. Died the same day. P.M.—Cholelithiasis, acute hæmorrhagic pancreatitis and fat necrosis.

Chronic Pancreatitis.—7 cases, 2 fatal.

Treatment.—Cholecystostomy, 1; choledochostomy, 1; posterior gastro-jejunostomy in 1.

Cases of interest.

(1) *Male, æt.* 39. Epigastric pain for 6 months. Syphilis 15 years ago. Tenderness below the right costal margin. Never jaundiced. Posterior gastro-jejunostomy for pyloric adhesions. Died a few hours later. P.M.—Duodenum bound down to the head of the pancreas. Stomach dilated and full of blood from the gastro-enterostomy wound. Head of pancreas was a mass of cysts. Microscopical report: "high degree of chronic pancreatitis."

(2) *Female, æt.* 55. Ten months' dyspepsia. One month diarrhœa and vomiting at onset, followed by much vomiting, constipation, and drowsiness. Very obese. Urine contained sugar, albumin, and acetone. Attacks of severe abdominal pain and sweating during the last fortnight. Died in coma 3 days after admission. P.M.—Right kidney practically a cyst. Left kidney showed advanced mixed nephritis. Pancreas showed well-marked fibrosis and fatty infiltration. Fat necrosis in the mesentery. Gall-stones in gall-bladder. Caseous mass in the apex of the left lung.

(3) *Male, æt.* 56. Syphilis 35 years ago. For the last 3½ years had passed bulky whitish and offensive stools up to 4 a day. Five months ago severe epigastric pain. Never jaundiced. Abdomen rather full, with slight epigastric tenderness. Total fat in fæces, 52·77 per cent.; neutral fat, 49·50 per cent.; fatty acids, 3·27 per cent. Wassermann reaction positive. Patient had mercurial inunctions and 5 grains trypsin *t.d.s.* Gained 9½ lbs. Stools practically normal when patient was discharged.

Pancreatic Cyst.—2 cases.

(1) *Female, æt.* 31.—Had an attack of jaundice 3 months ago. Swelling in

abdomen since. This was found to be a pancreatic cyst, and was treated by incision and drainage. Recovery.

(2) *Male, æt.* 50. Discharged a few weeks ago with the diagnosis of congenital cystic kidneys. At that time had a tumour on each side of the abdomen, moving slightly with respiration. Trace of albumin in urine. Cystoscopy negative. On readmission the tumour on the left side was much larger and appeared to be cystic. Laparotomy. Cystic tumour with a fibrous wall lay in the lesser sac. It contained a large quantity of blood-stained fluid and also some putty-like material. Report on contents: Fatty acid, 1 per cent.; trace of urea; no trypsin; amylolytic ferment and blood present. Died 17 days after operation. P.M.—The whole of the pancreas to the left of the neck had completely disappeared. The head was remarkably large and healthy, and was the tumour which had been mistaken during life for the right kidney. Fat necrosis in the omentum and mesentery.

93. Digestive, Various.

(*a*) Carcinoma of Liver.—3 cases.

Fatal case.—Male, æt. 41. Past history of a tuberculous abscess of neck. Wasting and weakness for the last 6 months. Liver large and hard. Extreme emaciation. Supposed to be a case of pulmonary tuberculosis. P.M.—No evidence of tubercle in lungs. Spleen and liver contained numerous nodules of growth. Stomach and intestine normal. This was a carcinoma and was thought to be a primary growth of liver.

(*b*) Liver Abscess.—3 cases, 1 fatal.

(1) *Male, æt.* 39. Malaria in India and East Africa. Occasionally had diarrhœa while abroad, but never dysentery. In Guy's 5 years ago for ulcerative colitis. Six weeks' severe pain in the right side of the chest, with much cough and anchovy sauce sputum. No leucocytosis. X rays showed the right side of the diaphragm to be raised. Half a grain of emetine was given 4 times a day, and the symptoms gradually cleared up.

(2) *Male, æt.* 38. Had enteric in 1910. Just returned from West Indies. Five weeks ago, severe pain with slight jaundice in right hypochondrium. Stools frequent, watery, and contained blood and mucus. Persistent hiccoughing for the last 24 hours. Sent up as a case of Addison's disease. Liver dulness started at fourth rib, and the edge was felt 2 inches below the costal margin. Right side of chest bulging. An abscess in the left lobe of the liver was incised and drained, and 2 days later a larger one in the right lobe was treated in similar fashion. Emetine was given hypodermically. Pus cultures sterile. No amœbæ seen. Recovery.

(3) *Male, æt.* 54. Died from secondary hæmorrhage 8 days after a liver abscess had been incised and drained. P.M.—Solitary abscess of liver. Ulceration of cæcum. Three recent duodenal ulcers. Altered blood in the large intestine.

(*c*) Gummatous Liver.—3 cases, 1 fatal.

(1) *Male, æt.* 36. A mass in the epigastrium had been noticed by the patient for the last 2 months. This was found to be a large irregular liver. Wassermann positive. Two injections of neo-salvarsan and mercurial inunction caused

a very rapid diminution in the size of the mass, which on admission reached down nearly as far as the umbilicus.

(2) *Male, æt.* 49. Attacks of pain and sweating in right hypochondrium for the last 9 months. No vomiting or jaundice. Rounded tumour, moving with respiration, visible in the epigastrium. Liver much enlarged; edge hard and notched. Spleen palpable. Wassermann positive.

(3) *Male, æt.* 46. A teetotaler. Syphilis denied. Losing weight for the last 18 months. Swelling of abdomen and œdema of legs for 3 months. Tapped 3 weeks before admission. Ascites. Spleen 2 inches below the costal margin. Liver greatly enlarged. Some small discrete glands in both axillæ. Thought to be a case of Banti's disease. Died 2 days after admission. Hilus pneumonia at the root of the left lung. Multiple gummata in spleen and liver, confirmed by microscopy. Pancreas showed chronic inflammatory changes.

(*e*) Acute Yellow Atrophy.—1 fatal case. Good health apart from malaria in 1913 until 3 weeks ago. Gradual onset of jaundice and drowsiness then occurred. Slight epigastric pain with some vomiting during the last week. Liver edge was felt 2½ inches below the costal margin, and was soft and tender. Spleen just palpable. Well-marked jaundice, which deepened, and the liver rapidly decreased in size. Delirium and incontinence of urine before death occurred a week after admission. No leucin or tyrosin in the urine. P.M.—Liver shrunken and flabby. Spleen enlarged and semi-diffluent. Numerous small recent gastric erosions. Microscopical report: "Extreme necrosis of liver-cells; pigmentation; no fatty change or free-iron reaction. Spleen greatly congested; pigmentation; no free iron reaction; marked activity of Malpighian corpuscles. Kidney: complete necrosis of epithelium of convoluted tubules; no inflammation."

DISEASES OF THE PERITONEUM.

94. Ascites.

2 cases, both probably due to malignant disease.

95. Tuberculous Peritonitis.

31 cases, only 1 fatal. Ascites present in 9. Laparotomy performed in 1 of these cases. Masses of glands or omentum noted in 6. Spleen palpable in 6. 1 case was operated on for supposed acute appendicitis; appendix normal; numerous enlarged mesenteric glands; cultures of peritoneal fluid sterile; cells scarce, chiefly small lymphocytes.

Fatal case.—Female, æt. 13. Attended the out-patient department at Great Ormond Street 6 years ago for "intestinal trouble." Eight weeks' history of diarrhœa, loss of weight, and pain across the upper abdomen, with occasional constipation. Pain worse directly after food. Abdomen rather full and tumid. No masses. No ascites. X rays showed mottling of both apices suggestive of recent tuberculous infection. Died 3½ months later. P.M.—Numerous tuberculous ulcers in ileum, jejunum, and cæcum. Caseating mesenteric glands. Cavity in each upper lobe. Intestines all adherent.

96. Peritonitis, Various.

Pneumococcal Peritonitis, 1. *Female, æt.* 10. Laparotomy and appendicectomy; drainage. Developed pneumonia after operation. Exploration for empyema, none found. Recovery.

Streptococcal Peritonitis, 4. Laparotomy in 3, with 1 death. 1 case died without operation.

Peritonitis of Unknown Origin, 4. Laparotomy in 3, with 1 death. 1 case died without operation. Readmitted with suppurating ovarian cyst, 1.

Disseminated Peritoneal Carcinoma, 1.

Peritoneal Bands and Adhesions, 5. Laparotomy in all. Readmitted with ventral hernia, 1; radical cure.

HERNIA.

97. (*a*) Inguinal, Reducible.

Both sides affected in 75; no operation in 25. Previous operation for appendicitis, hernia on right side, 2. Readmitted, 4; varicocele after operation for left inguinal hernia, 1; inguinal hernia on the opposite side, 1; chronic orchitis, 1.

Also undescended testis, 10; atrophic testis, 1; cysts of epididymis, 2; hydrocele, 9; phimosis, 4; hæmaturia, 1; urethral stricture, 1; varicocele, 6; varicose veins, 4; hæmorrhoids, 2; deflected septum, 1; nasal polypi, 1; tonsils and adenoid, 4; nævus of leg, 1; synovitis of knee, 1; hallux valgus, 1; scarlet fever after operation, 1.

Fatal case.—Male, æt. 48. Radical cure of left inguinal hernia by Foster's method. On the 9th day the patient got out of bed without leave and fainted; he died shortly after. P.M.—Pulmonary embolism.

(*b*) Inguinal, Irreducible.

No operation in 2. Radical cure of umbilical hernia in 1.

(*c*) Inguinal, Strangulated.

No operation in 1. Undescended testis in 4. Readmitted with chronic obstruction, laparotomy, and division of adhesions, 1.

Fatal cases.

No operation, 1. Death took place under anæsthesia before the operation had begun.

Herniotomy and reduction, 3. One arrived moribund and died on the table, another died of pulmonary embolism 9 days after operation, and the third died of local gangrene and paralytic ileus.

Laparotomy and reduction, 1. Death due to prolonged obstruction.

Herniotomy and resection of ileum, 2. Died of pneumonia, 1; chronic nephritis, 1.

Laparotomy and resection of ileum, 1. Died of shock.

Suppurating omental hernia, 1. Died of cerebral hæmorrhage.

(*d*) Inguinal, Recurrent.

Both sides affected, 3; hydrocele of cord, 1; readmitted with hydrocele, 1.

(*e*) Femoral, Reducible.

No operation in 2. Also, inguinal hernia, 1; cysts of epididymis, 1.

(*f*) Femoral, Irreducible.

No operation in 1.

Female, æt. 63. Had had an irreducible right femoral hernia for many years. During the last few weeks she had had great pain in the region of the hernia as well as abdominal pain and vomiting. Admitted with a large right inguino-femoral abscess. At operation, the condition proved to be one of appendicitis in a femoral hernial sac. Appendicectomy, suture of canal, and drainage. Recovery.

(*g*) Femoral, Strangulated.

In 1 case, a temporary fæcal fistula followed herniotomy and reduction of the strangulated ileum.

Fatal cases.

Herniotomy and reduction, 2. Both died of broncho-pneumonia.

Herniotomy, laparotomy, and resection of ileum, lateral anastomosis, 1. Died on the 4th day.

Male, æt. 77. Radical cure for strangulated femoral hernia May 25th, sac contained ileum. The man was discharged from the hospital on June 10th, and readmitted with general peritonitis on June 15th. At operation, a perforation of the ileum was discovered. Death on the 6th day.

(*i*) Umbilical and Ventral.

Reducible and irreducible. No operation in 4; also inguinal hernia, 1; fistula-in-ano, 1. Incisional ventral herniæ, 17.

Fatal cases.

Female, æt. 36. Died of pneumonia after operation.

Male, æt. 46. Admitted with an inflamed umbilical hernia and cellulitis of the surrounding tissues. The hernia was incised, and disclosed some gangrenous omentum. Operation was followed by septic purpura and death took place. P.M.—Hæmorrhage had taken place into all the organs. Fatty heart and broncho-pneumonia.

(*j*) Umbilical and Ventral, Strangulated.

Fatal cases.—Resection of ileum and axial anastomosis, 2; resection of transverse colon and subsequent ileo-colostomy, 1.

(*l*) Various.—Extraperitoneal epigastric lipoma, 1.

DISEASES OF THE LYMPHATIC SYSTEM.

98. Adenitis.

(*a*) Simple.—Cervical, 17; facial, 1; supra-clavicular, 1; inguinal, 8. Treated by X rays, 1.

(*b*) Tuberculous.—Cervical, 118; axillary, 5; epitrochlear, 1; inguinal, 2; mesenteric, 2; general, 2. Readmitted, 6. Scarlet fever, 1. Fatal, 1—died of phthisis.

99. Glands, Malignant.

Malignant glands of neck, 13. No primary focus found, 6; recurrent after epithelioma of mouth, 1; tongue, 1; lip, 1. Treated by radium, 5.

Melanotic sarcoma of glands of neck, 1. Recurrent after excision of primary focus from scalp.

Recurrent carcinoma of supra-clavicular glands after amputation of breast, 1.

100. Various.

Lymphatic œdema of leg, 1.

DISEASES OF THE DUCTLESS GLANDS.

101. Addison's Disease.

3 non-fatal cases.

(1) *Female, æt.* 52. Twelve years ago treated for myxœdema with thyroid extract and recovered. No thyroid preparation had been taken for some years. Vomiting and weakness for the last year, and increasing pigmentation of skin for 9 months. Diffuse pigmentation chiefly round waist; axillæ not affected, nor the mucous membranes. Blood-pressure varied between 105 and 128 mm. Hg. No lethargy. Von Pirquet negative. Gained weight rapidly until put on thyroid tablets.

(2) *Female, æt.* 29. Skin getting darker for 4 years. Three years ago patches of leucoderma appeared on the hands, and at the same time she had attacks of epigastric pain. Fainting attacks. Vague pain in the knees. Increasing weakness with occasional retching. Blood-pressure 107 mm. Hg.

(3) *Male, æt.* 20. Previous admissions: 1910 for "nephralgia," 1912 renal pain; skiagram and cystoscopy negative; normal appendix removed, followed by a second laparotomy, at which omentum was found adherent to the old wound. 1913, lumbar pain. Weakness, vomiting, and constipation for the last 4 months. Feeble slow pulse. Skin of face pigmented. No pigmentation of mucous membranes. Blood-pressure 105 mm. Hg. Had several functional fits while in hospital.

102. Graves' Disease.

26 cases—only 2 males affected; 1 fatal case. Ligature of superior thyroid vessels in 2 cases, one of which improved considerably; the other derived some temporary benefit. X rays were applied to the thyroid in 5 cases and to the thymus in 1 case, and all were the better for this treatment. Definite history of worry and shock only noted in 3 cases. Family history of Graves' disease in 1; hair falling out in 11; signs suggesting an enlarged thymus in 5. One case had a hemianæsthesia.

Cases of interest.

(1) *Girl, æt.* 12. A well-marked case of recent development, with all the classical symptoms and signs. Improved considerably after 3 applications of X rays to the neck. Readmitted a month later with marked mental disturbance. Had belladonna by mouth and 3 more applications of X rays. Again improved both mentally and physically.

(2) *Female, æt.* 24. Enlargement of neck for 2 years; palpitation for 12 months. Thyroid considerably enlarged; double murmur heard over it; tremor of hands; pulse 100 to 120. Slight proptosis. Urine normal. Condition sud-

denly changed for the worse, and patient died. Much headache and vomiting and feeble pulse during the last 24 hours. P.M.—Persistent thymus. Heart muscle firm. Passive congestion of viscera. Graves' disease confirmed by microscopy; normal thymus tissue.

103. Thyroid, Various.

Parenchymatous goitre, 13; adenoma, 18; carcinoma, 2 (radium employed in 1).

Cases of interest.

Female, æt. 29. Previous admission in 1901 for parenchymatous goitre; partial thyroidectomy. Readmitted with another swelling of 5 years' duration. Excision.

Female, æt. 37. Previous admission in 1906 for adenoma of thyroid; excision. Readmitted with carcinoma of thyroid; excision.

Fatal case.—Female, æt. 18. Parenchymatous goitre of 2 years' duration; partial thyroidectomy. The operation was borne well, but death occurred 4 hours later. P.M.—Much effusion round the remains of the thyroid. Thymus enlarged. Microscopical report: Cystic adenoma of thyroid. Thymus showed large numbers of Hassal's corpuscles in all stages of degeneration. Pineal and adrenals normal. Anterior lobe of pituitary hypertrophied. Parathyroids showed well-marked alveolar spaces enclosing colloid.

104. Various.

Myxœdema.—7 cases, all in women.

Complications.—Hæmatemesis in 1; pulmonary tuberculosis in 1.

All cases derived much benefit from thyroid extract. Length of history varied from 18 months to 5 years.

One case improved considerably during the first few months of a recent pregnancy.

Fatal case.—Female, æt. 47. Rheumatic fever when 19. Drinks 5 pints of beer daily. Weight increasing for 4 years. Apathetic for the last 12 months, and memory failing for 6 months. A typical advanced case. Temperature 95° F. Died 3 days after admission. P.M.—Mitral stenosis. Aortic disease. No thymus found. Only a trace of thyroid tissue left. Pituitary slightly enlarged. Ovaries atrophic. Colon contained intestinal sand. Passive congestion of viscera. Heart-muscles firm and healthy in appearance. Microscopical report: "Extreme fibrosis of thyroid. Skin showed thickening of corium and an increase of fibrous tissue. Colloid formation in pars intermedia of pituitary gland. Head of pancreas normal; islets of Langerhans degenerated in tail. Adrenals normal. Parathyroids not found. Corpora lutea in ovaries sclerosed."

Acromegaly.—2 cases.

(1) *Male, æt.* 56. Previous admission for acromegaly in 1896. Typical appearance. No loss of sexual power. No glycosuria. Double optic atrophy, not of a hemianopic type. Sella turcica enlarged. Knee-jerks absent. Pupils sluggish. No Wassermann done.

(2) *Female, æt.* 52. Amenorrhœa since 40. A typical case. Sella turcica enlarged. Carpal bones showed signs of osteo-arthritis.

There was one fatal case in a *boy, æt.* 4 *months,* who was admitted for an

undescended testicle. Died suddenly 2 days after admission before any operative interference. P.M.—Thymus weighed 30 grams; histologically normal. No evidence of tracheal compression. Pituitary normal. No excess of lymphoid tissue in the ileum.

DISEASES OF THE GENITAL SYSTEM.

105. Diseases of the Breast.

(*a*) Simple.

(i) Acute mastitis, 5. Incision in 4, amputation in 1.

(ii) Chronic lobar mastitis, 2. Readmitted 1. Amputation in both.

(iii) Chronic lobular mastitis, 27. Amputation of breast, 21; excision of tumour, 5.

(iv) Tuberculous mastitis, 4. Excision in 3; incision and curetting in 1.

(v) Cystic adenoma, 3. Excision in all.

(vi) Fibro-adenoma, 10. Excision in 8, amputation of breast in 2.

(vii) Papilloma of breast, 1. Amputation.

(viii) Cyst of breast, 1. Excision.

(ix) Eczema of nipples, 1. Amputation.

(*b*) Malignant.

Columnar-celled carcinoma, 7; spindle-celled sarcoma, 1; Paget's disease of the nipple, 1; recurrent carcinoma, 13, 5 treated with radium. Erysipelas after operation, 1.

Fatal cases.—Septicæmia, 2; pneumonia and septicæmia, 1; brown atrophy of heart, 1.

106. Testicle, Undescended.

Bilateral, 1. Orchidectomy, 6; abdominal reposition, 1; scrotal implantation, 13.

107. Testicle and Epididymis, Various.

(*a*) Simple Inflammatory.—Gonococcal, 1; traumatic, 3; cause not ascertained, 4. Bilateral, 1.

(*b*) Tuberculous.—Bilateral, 3; treated with tuberculin, 1.

(*c*) New Growths.—Teratoma of testis, 1; orchidectomy.

(*d*) Cysts of Epididymis, 3; bilateral in 2.

108. Tunica and Processus Vaginalis.

(*a*) Hydrocele of Tunica Vaginalis.—Bilateral, 2; inguinal hernia, 2 phimosis, 3; gonorrhœa, 1; varicocele, 1; undescended testis, 1.

(*b*) Hydrocele of Cord, 2. Excision in both.

(*c*) Hæmatocele, 2. Excision, 1; eversion, 1.

109. Disease of the Ovary.

(*a*) Cysts, Simple and Multiple.

Simple.—7 cases, in 1 of which the disease was bilateral, all treated by removal

of tumour. 1 case also had a dilatation and curetting, and Emmet's operation performed.

Cystadenoma.—28 cases. Of these 13 were straightforward and had ovariotomy performed, in 1 case a partial hysterectomy was also done, and in 1 case appendicectomy. 9 had twisted pedicles; in all cases the tumour was removed, and in 1 case in which there was subperitoneal fibromyomata, myomectomy was performed. 1 were suppurating, and were treated by removal and drainage; in 1 of these the appendix was also removed. 2 had ruptured; 1 treated by simple ovariotomy, 1 by complete hysterectomy with both appendages. In this case the tumour was infected, and the patient died the same day of general peritonitis.

Blood cysts.—6 cases, in 4 of which the disease was bilateral. In all cases tumours removed, and in 3 the vermiform appendix also.

(*b*) Teratomata.—3 cases. 1 bilateral with some small subperitoneal fibroids, both cysts and the fibroids removed. 2 unilateral, in both cases ovariotomy was done. One of these cases was about 4½ months pregnant, but the operation in no way interfered with the pregnancy.

(*c*) Other Diseases, including Malignant Disease.

Carcinoma.—6 cases. All operated upon. In 5 it was found possible to remove the tumour, in the remaining case the growth was too extensive to allow of this. 2 of these cases died; 1 from general peritonitis, 1 from carcinomatosis.

Sarcoma.—1 case. Disease unilateral, the tumour was removed.

Fibroma.—1 case. This patient also had severe menorrhagia; a complete hysterectomy was done with removal of right appendages.

Ovarian pain.—2 cases, both examined under an anæsthetic, but nothing abnormal found.

(*d*) Broad Ligament Cysts.—4 cases; in 2 the pedicle was twisted and in 1 the cyst was inflamed; in all cases the tumour was removed and the vermiform appendix also.

110. Diseases of the Fallopian Tubes.

(*a*) Salpingitis.

31 cases disease unilateral. 14 of these were treated by rest in bed. 6 had the affected tube only removed. 8 had the affected tube and ovary of the same side removed, 3 of them having a drainage-tube left in for 48 hours. 2 cases also had a dilatation and curetting done, and one a ventral fixation. The vermiform appendix was removed in 5 cases. 1 case, acute, was treated by laparotomy and drainage.

31 cases disease bilateral. 4 treated by removal of both appendages, 4 treated by removal of both tubes, 1 of these also had the appendix removed; 12 by removal of both tubes and one ovary. 6 also had appendicectomy. 4 by removal of both tubes, one ovary and a part of the other; 4 by hysterectomy with both tubes, in 2 of these the hysterectomy was complete and in 2 supravaginal; in 2 of the cases both ovaries were removed and in 2 one ovary. 1 case also had acute appendicitis and the vermiform appendix only was removed. 1 case was treated by rest, and 1 discharged herself before any treatment was carried out.

(*b*) Pyosalpinx and Tubo-ovarian Abscess.

7 cases of unilateral pyosalpinx. 5 treated by removal of tube and ovary on affected side, 1 by removal of the tube and the vermiform appendix, 1 by supra-vaginal hysterectomy, both tubes and the ovary on the affected side.

7 cases of double pyosalpinx. 2 treated by removal of both appendages, 3 by hysterectomy (1 complete, 2 supra-vaginal). In 2 of these both appendages were removed and in 1 both tubes and one ovary. 1 by removal of both tubes and one ovary, and 1 by removal of both tubes, part of both ovaries; a ventral fixation was done in this case.

In 3 cases a pyosalpinx was present on one side and salpingitis on the other; in 2 of these both appendages were removed, and in 1 both ovaries and one tube.

4 cases of ovarian abscess and 1 tubo-ovarian abscess. The affected parts in all cases were removed with the tube of the same side, and in 1 case the tube of the opposite side. In 1 case a complete rupture of the perinæum was also repaired.

111. Ectopic Gestation.

12 cases of tubal rupture all treated by operation; 1 patient had salpingitis of opposite tube, so it was also removed.

4 cases of tubal mole all treated by removal of affected parts.

2 cases of pelvic hæmatocele, 1 treated by vaginal drainage, 1 discharged herself untreated.

1 case of tubal abortion, with a pyosalpinx on the opposite side, treated by removal of both tubes.

1 case of ? ovarian gestation treated by removal of part of the ovary.

112. Menstrual Disorders.

(*a*) Menorrhagia and Metrorrhagia.

18 cases of menorrhagia. 16 of these were treated by dilatation and curetting. 1, who also had prolapse of the vaginal walls, had a posterior colpo-perineorrhaphy. 2 were treated by complete hysterectomy with removal of the appendage of one side.

17 cases of metrorrhagia treated by dilatation and curetting. 1 of these had radium treatment about 9 months later, and 1, who had prolapse of the the abdominal walls, had a posterior colpo-perineorrhaphy. 1 case was treated by vaginal hysterectomy, 1 by radium, and 2 by drug treatment.

(*b*) Dysmenorrhœa.

23 cases treated by dilatation and curetting. 2 of these also suffered from menorrhagia, and 1 was readmitted for chronic appendicitis for which an appendicectomy was done. 1 case who also had amenorrhœa and had been previously curetted, was treated electrically. 1 case treated by rest.

113. Pregnancy and its Disorders.

(*a*) Abortion.

19 cases of incomplete abortion. In all cases the uterus was evacuated under an anæsthetic. 2 cases of inevitable abortion; 1 case terminated naturally; in the other the uterus was evacuated; this latter patient was readmitted 1 month later on account of metrorrhagia, and a dilatation and curetting was done. 1 case of threatened abortion treated by rest. 1 case of carneous mole; the mole

was removed. 2 cases of hydatidiform mole. 1 case with cardiac disease had a complete hysterectomy done; in the other part of the ovum had been expelled, the uterus was evacuated, but the patient developed septicæmia and died.

(*b*–*i*) See report of Mary Ward.

114. Diseases of the Body of the Uterus.

(*a*) Endometritis.—2 cases; 1 senile, 1 adenomatous, both treated by dilatation and curetting.

(*b*) Fibromyomata.—In 31 cases supra-vaginal hysterectomy was done; in 12 of these the appendages on one side were removed, in 2 both tubes and 1 ovary, and in 7 both appendages. 2 cases died from general peritonitis. 1 case also had a Lefort's operation for complete procidentia.

Complications.—1 case also had a nephrectomy done. 1 case was complicated by pregnancy, 1 with appendicitis for which appendicectomy was done. 2 cases a hydrosalpinx, 1 a pyosalpinx and 1 a hæmato-salpinx. 22 cases had a complete hysterectomy done. In 4 of these the appendages of one side were removed in 3 both tubes and one ovary, and in 9 both appendages.

Complications.—1 case cholelithiasis for which cholecystotomy was done, 1 with appendicitis had an appendicectomy. 1 case bilateral ovarian teratomata, 1 chronic salpingitis, 1 bilateral hydrosalpinx. 3 cases treated by myomectomy. 1 of these was also pregnant; she aborted, and the placenta had to be removed under an anæsthetic. 1 case with extensive necrosis of the fibroid was admitted with general peritonitis and died without any operation having been performed. 2 cases treated by rest.

(*c*) Polypi.—7 cases of mucous polypi, all treated by removal of the growth and dilatation and curetting. 9 cases of fibroid polypi. In 2 of the cases the growth was sloughing; they were all treated by removal of the tumour. 3 cases of placental polypi, treated by dilatation and curetting.

(*d*) Carcinoma of Body of Uterus.—7 cases treated by abdominal hysterectomy. In one case, which was undoubtedly malignant macroscopically, the microscopical report was no evidence of malignancy, the probability was that the piece sent down for examination showed no changes. 2 cases treated by vaginal hysterectomy. 1 case who came into hospital for menorrhagia was discovered on curetting to have carcinoma of the body of the uterus. A complete hysterectomy, with removal of both appendages was performed. However, a fæcal and urinary vaginal fistula developed, and the patient died about 9 days after the operation. 1 inoperable case was sent to the infirmary.

(*e*) Various.—1 case of pyometra with double pyosalpinx and abscess of ovaries was treated by complete hysterectomy with removal of both appendages.

115. Diseases of the Cervix.

(*a*) Carcinoma.—23 cases were inoperable. Of these 7 were sent home without treatment. 2 had the growth scraped and cauterised. 14 were treated with radium, 1 after a laparotomy had been done with a view to hysterectomy, but the involvement of the bladder made the operation impossible. 1 case inoperable died in the Hospital, and the P.M. showed that the growth had ulcerated into Douglas' pouch and set up peritonitis. 9 cases were treated by Wertheim's operation; of these 3 died within seven days of the operation, and 1 returned three months later with a carcinomatous ulcer of vaginal wall which

was excised. 5 cases were treated by abdominal hysterectomy, and 1 by vaginal hysterectomy.

(*b*) Various.—3 cases of elongation of cervix with prolapse treated by amputation of cervix and in 1 case post colpo-perineorrhaphy, in 1 ventral fixation, and in the third both operations were performed. 1 case of lacerated cervix treated by Emmet's operation. 1 case of cyst of anterior lip of cervix with elongation treated by amputation, and in 1 case sent to the Hospital as obliteration of cervical canal nothing abnormal was found.

116. Pelvic Inflammation.

(*a*) Cellulitis.—3 cases, 2 treated by rest in bed and in 1 an abscess which had formed was incised and drained.

(*b*) Peritonitis.—7 cases treated by rest in bed. 4 cases by laparotomy and drainage; in 2 of these the appendix was removed. 1 case by laparotomy and vaginal incision and drainage; this patient later developed an empyæma and had to have a rib resected. 1 case treated by vaginal incision and drainage and about three weeks later a laparotomy followed by removal of both tubes. 1 case by supra-vaginal hysterectomy with the left appendages and drainage both abdominally and P.V. 1 case the abscess discharged itself *per rectum*.

117. Vagina and Vulva.

(*a*) Epithelioma.—4 cases, in 1 of which the growth had recurred after removal 7 years before; in all cases the growth was excised.

(*b*) Bartholin's Gland.—1 case of cyst which discharged itself.

(*c*) Urethral Caruncle.—5 cases treated by excision and cautery.

(*d*) Vagina, Various.—3 cases of primary carcinoma of vaginal wall, all treated by excision of the growth. 1 case died from suppurative peritonitis, but there was no wound of Douglas' pouch, and the track of infection was impossible to define. 1 case who had a recurrence was treated by 5 applications of radium at intervals of from 3–6 weeks; the recurrence never completely disappeared, but the pain and discharge were much relieved. 2 cases of vesico-vaginal fistula both treated by repair of the opening. 1 case of severe laceration of the vagina during confinement treated by douching. 1 case of vaginismus treated by dilatation and incision of vaginal outlet. 1 case of cyst of anterior vaginal wall not treated surgically. 1 case of vaginal obstruction by a congenital band was treated by removal of the obstruction. 1 case of recurrent carcinoma in vaginal scar followed by hysterectomy treated with radium.

(*e*) Leucorrhœa, etc.—4 cases of leucorrhœa, 3 treated by dilatation and curetting and 1 by douching. 1 case of acute vaginal discharge with a *B. coli* cystitis treated by douching, etc.

(*f*) Vulva, Various.—2 cases of chronic fibrosis of vulva treated by amputation of labia. 1 case of fibroma of labium majus treated by excision.

118. Ruptured Perinæum.

7 cases complete rupture all treated by post colpo-perineorrhaphy. 2 of these also had prolapse; in 1 a ventral fixation was done, and in the other amputation of cervix and anterior colporrhaphy. 2 cases incomplete treated by perineorrhaphy.

119. Prolapse and Displacement.

(*a*) Prolapse of Uterus.—There were 33 cases of which 6 were complete. Operations were performed in all cases. 31 cases, post colpo-perineorrhaphy 14 cases, ventral fixation; 14 cases, anterior colporrhaphy; 18 cases, amputation of cervix; in most of the cases these operations were combined. 2 cases also had mucous polypi of the cervical canal which were removed. 1 case had a vaginal hysterectomy followed by a post colpo-perineorrhaphy. 1 case with a lacerated cervix had an Emmet's operation. 1 case with pelvic inflammation had an exploratory laparotomy.

(*b*) Prolapse of Vaginal Walls.—21 cases, 20 of which were treated by operation. Post colpo-perineorrhaphy, 19; anterior colporrhaphy, 4. 3 cases who also had retroversion had ventral fixation done; 1 case with menorrhagia had dilatation and curetting. 1 case with a lacerated cervix had an Emmet's operation. 1 case with a double hydrosalpinx had the tubes removed *per vaginam*. 1 case with complete prolapse of vaginal walls following a vaginal hysterectomy 1 year before had a Le Fort's operation. 1 case sent out with a ring pessary.

(*c*) Retroversion.—7 cases. 5 treated by ventral fixation; in one of these the left appendages were removed as the ovary was cystic. 1 case who had had chronic pain for many years was treated by a complete hysterectomy with removal of both appendages. 1 case the uterus replaced under an anæsthetic and a Herman-Hodge pessary inserted.

120. Genital, Various.

5 cases of sterility treated by dilatation and curetting. 1 case in which a ring pessary had to removed under an anæsthetic.

DISEASES OF THE URINARY SYSTEM.

121. Movable Kidney.

Hydronephrosis, 3. Previous nephropexy, readmitted for appendicectomy, 1; previous appendicectomy and ileo-colostomy, readmitted for nephropexy, 1.

122. Renal Calculus and Colic.

Colic, 28; calculus, 17. Also ureteric calculus, 1. Readmitted, 5.

Fatal case.—Female, æt. 31. Previous admission in 1912 with right renal calculus; nephrectomy was performed. For the last 4 months the patient had had left-sided renal colic and hæmaturia; the urine contained blood and pus, and a skiagram showed 4 stones. The left kidney was explored, and the stones were removed. After operation, a small amount of urine leaked from the wound, but as this diminished hæmaturia began again. Death took place 6 weeks after operation. P.M.—Malignant growth was found in the situation of the right supra-renal body.

123. Hydronephrosis.

Cause.—Malformation of the renal pelvis, 1; stenosis of ureter, 3; urethral stenosis, 1; old pelvic cellulitis with kinking of both ureters, 1; unknown, 1.

Bilateral in 3.

Fatal cases.

Female, æt. 48. Admitted moribund and died without operation. P.M.—Bilateral hydronephrosis due to old pelvic cellulitis.

Male, æt. 59. Admitted on March 11th with a 12 days' history of left lumbar pain and hæmaturia. Purpuric spots were noticed on the right leg. On the 16th a large tender swelling was noticed in the left loin, and was explored; it was found to be a hæmonephrosis; clots were evacuated and the cavity drained. After operation, hæmorrhage took place from the wound, necessitating ligature of the renal artery on March 18th. The condition of the patient had been critical before operation, but now improved in spite of persistent hæmaturia. On March 28th, the bladder was so full of clots that supra-pubic drainage was required, and on the following day the patient died. P.M.—Urethral stenosis and bilateral hydronephrosis. The renal hæmorrhage was probably purpuric in origin.

124. Pyonephrosis.

Due to calculus, 3; cause unknown, 5. Nephrectomy in 2, with 1 death; nephrotomy in 5, with 2 deaths.

Fatal cases.

Female, æt. 50. Right side; nephrectomy and drainage. Died of septicæmia on eighth day.

Male, æt. 36. Several previous attacks of right renal colic; nephrectomy. P.M.—Calculi in right ureter; chronic parenchymatous nephritis, left.

Male, æt. 31. Right side; nephrotomy and drainage. On the sixth day the tube was changed, and death took place in a few hours. P.M.—Pulmonary embolism.

125. Kidney and Ureter, Various.

(*a*) Pyelitis.

11 cases; 3 of them were in pregnant women. Negative exploration of kidney in 1 case. 2 cases treated with vaccines, 1 of these being an autogenous vaccine. In the latter case, by the time the vaccine was ready, the urine was free from blood and pus, and the temperature was normal. In the former case, the temperature, which had already begun to fall, became normal three days after the first dose of vaccine.

(*b*) Tumour.

(1) *Male, æt.* 45. Left kidney excised and found to be carcinomatous. Re-admitted 2½ months later with a recurrence in the scar.

(2) *Female, æt.* 69. No symptoms whatever, except "weakness." Mass in right iliac fossa. This was explored and found to be a hypernephroma. Nephrectomy by anterior route. Recovery.

(3) *Female, æt.* 52. Swelling left side of neck at 9; incised at 17; sinus ever since. Hæmaturia on several occasions. Pain and swelling left arm for the last 7 months. Right kidney enlarged and mobile. Slight albuminuria. Bone cysts in the upper ends of left humerus, ulna, and radius. Bence Jones' test negative. *Nil* done.

(4) *Female, æt.* 30. Laparotomy for an elongated tumour in right upper quadrant of abdomen. This was a kidney containing numerous small cysts, and was not removed.

(*c*) Tuberculosis of Kidney.

Bilateral in 1; generalised tuberculosis, 1. No operation in 7.

Fatal case.—Male, æt. 22. Catheterisation of the ureters proved the presence of tubercle bacilli in the urine of the right side. Nephrectomy. Died 19th day. P.M.—Tubercle of bladder and vesicula seminales; parenchymatous nephritis left; phthisis; uræmia.

(*d*) Various.

(i) Ureteric calculus, 5. Stones removed in 4.

(ii) Renal sinus, 2. Following nephrolithotomy, 2; no kidney on opposite side, 1; nephrectomy, 1.

(iii) Thrombosis of kidney, 1. *Female, æt.* 1. Fatal.

126. Acute Nephritis.

20 cases; 2 of them fatal. 18 of the cases were in males. Previous history of measles in 5; scarlet fever in 2; diphtheria in 1. Urine free from albumin on discharge in 5 cases. One of the non-fatal cases had pulmonary tuberculosis.

Fatal cases.

(1) *Male, æt.* 15. Measles but not scarlet fever. Two weeks' history of œdema of face, legs, and oliguria. Ascites. Albumin and blood in urine. Albuminuric retinitis. Epistaxis for 48 hours and a fit with oliguria preceded death. P.M.—Left kidney absent. Right kidney in a condition of subacute inflammation, and was very large and rather pale.

(2) *Male, æt.* $3\frac{10}{12}$. No history of measles or scarlet fever. Admitted with a 3 days' history of œdema of face and legs. Exacerbation 3 weeks later. Ascites. Increasing œdema of legs. Paracentesis abdominis once. After a varied treatment of 6 months' duration, he contracted measles from another child in the ward and died a few days later. P.M.—Kidneys very large and rather pale. Capsules stripped easily. Broncho-pneumonia. Left ventricle hypertrophied.

127. Chronic Nephritis.

29 cases; 6 fatal. Mortality 20 per cent. 5 of the fatal cases died of uræmia, and 1 had two small hæmorrhages in the pons. Only 1 of the 5 fatal cases had a history of scarlet fever.

Female, æt. 40. Right kidney removed elsewhere 12 years ago, probably for pyonephrosis. Headaches and dyspnœa on exertion ever since. Urine ·36 per cent. albumin. Blood-pressure 170 mm. Hg. Died in uræmia. P.M.—Renal heart. Moderate degree of chronic mixed nephritis in the remaining kidney.

Of the 23 non-fatal cases, there was a definite history of syphilis in 3, and scarlet fever in 1. 4 had ascites, and 1 effusion into both pleuræ. Retinitis only noted in 1 case. 4 had a history of alcoholic excess, 2 of lead poisoning, and 1 other patient had, at one time, been a plumber. 2 had uræmic symptoms. Exploration of kidney in 3 cases, nephrectomy for supposed tuberculous kidney in 1 case, the histological examination merely showing changes due to chronic inflammation. Nephrotomy for supposed calculus in the other two cases operated upon.

Cases of interest.

(1) *Male, æt.* 22. Syphilis 9 months ago, treated with 2 injections of salvarsan and 10 injections of mercury. Six months later albuminuria was noticed during a routine examination, but apparently there were no symptoms of renal disease at that time. A month later, an attack of influenza was followed by œdema of ankles. Urine ½ albumin. No casts seen. Heart normal. Improved considerably under treatment with hot-air baths and potassium iodide.

(2) *Male, æt.* 43. Lead colic treated here 10 years ago. Drinks 4 to 5 pints of beer daily. Œdema of face, arms, and legs, ascites and double hydrothorax on admission, with a 5 weeks' history of headache and drowsiness. Urine 1010, contained blood and much albumin. Blood-pressure 225 mm. Hg. Uræmia developed in spite of hot-air baths, and was relieved by lumbar puncture. Cerebro-spinal fluid contained 44 per cent. small lymphocytes and 56 per cent. polynuclear cells.

(3) *Male, æt.* 30. Syphilis 7 years ago. Up to age of 23 was a plumber. Severe headaches for 12 months. Urine 1012, contained much albumin. Renal heart. Blood-pressure 230 mm. Hg. Fell to 150 mm. Hg. after one lumbar puncture. A few days later it was 200 mm. Hg., and was lowered to 175 by a second lumbar puncture. Headache was greatly relieved by this treatment, but a fortnight after admission uræmia supervened and patient was discharged at his parents' request. Wassermann reaction on cerebro-spinal fluid negative. Noguchi negative; excess of small lymphocytes present.

128. Vesical Calculus.

Supra-pubic cystostomy in 8. Suture of fistula required in 1.

129. Vesical, Various.

(*a*) Carcinoma.—Radium application in 2. Excision of growth in 2, with 1 death.

Fatal cases.

Male, æt. 60. Supra-pubic cystostomy. P.M.—Extensive growth of posterior wall of bladder. Broncho-pneumonia.

Male, æt. 68. Supra-pubic excision, a broad tumour of the fundus. P.M.—Granular kidneys and uræmia.

Male, æt. 54. Previous admission in 1912, papilloma of bladder excised. Supra-pubic cystostomy. P.M.—Carcinoma not involving scar of previous operation. Ascending nephritis and uræmia.

(*b*) Papilloma.—Previous admission for papilloma, 1; treated by fulguration, 2; excision, 2.

Fatal case.—Male, æt. 59. Papilloma of bladder causing left hydronephrosis. Laparotomy.

(*c*) Cystitis.—Tuberculous in 2.

Fatal case.—Female, æt. 54. P.M.—Ascending nephritis.

(*d*) Various.—Hæmaturia, 17; dysuria, 2; enuresis, 1; retention, 1; pin in bladder, 1; hypertrophy of bladder, 1; supra-pubic fistula, 1.

130. Prostate.

(*a*) Simple Enlargement.—No operation in 7; admitted with acute retention, 5. Prostatectomy followed by bilateral femoral thrombosis, 1.

Fatal cases.

(i) No operation, 1, *æt.* 65, admitted with acute retention and uræmia.

(ii) Supra-pubic cystostomy, 3; uræmia, 2; broncho-pneumonia, 1.

(iii) Prostatectomy, 4; nephritis, 1; œdema of lungs, 1; pneumonia, 1; hæmorrhage.

(*b*) Carcinoma.—No operation in 4; admitted with acute retention, 1; treated with radium, 2.

Fatal cases.

(i) No operation, 2. Nephritis, 1; abdominal carcinomatosis, 1.

(ii) Prostatectomy, 4. Secondary growths, 2; peritonitis and nephritis, 1; no P.M., 1.

(*c*) Prostatic Bar, 1. *Male, æt.* 59. Supra-pubic cystostomy and removal of bar. Died of hæmorrhage.

(*d*) Prostatic Calculi.—Acute retention in 1.

131. Urethra and External Genitalia.

(*a*) Phimosis.—Syphilis, 1; gonorrhœa, 1; in-growing toe-nail, 1.

(*b*) Urethral Stenosis, 1. *Male, æt.* 49. Stenosis produced by a kink in the membranous urethra.

(*c*) Urinary Fistula.—After removal of urethral calculus, 1; after external urethrotomy, 1.

132. Urethral Stricture.

Admitted with acute retention, 12; traumatic, 3; carcinoma of rectum, 1; pyelitis, 1; perineal fistula, 2; peri-urethral suppuration, 1.

Fatal cases.—Nephritis and uræmia, 5; extravasation of urine, 1; pneumonia, 1; no P.M., 1.

133. Urinary, Various.

(*a*) Pyuria.—*Staphylococcus albus* cultivated in 1 case.

(*b*) Bacilluria.—*B. coli* cultivated in 6 cases. 1 case was treated with a vaccine. Cerebral diplegia in 1 case.

DISEASES OF THE MUSCULAR SYSTEM.

134. Muscles.

Sarcoma of leg, 1; carcinoma of thigh, 1; ? primary focus, 1; infective granuloma of thigh, 1; suppurating myositis of latissimus dorsi, 1.

DISEASES OF BURSÆ AND TENDONS.

135. (*a*) Chronic Bursitis, 28.

Prepatellar, 21; semi-membranosus, 3; tendo Achillis bursa, 1; trochanteric bursa, 1; bursa over internal malleolus, 1; also lipoma of thigh, 1.

(*b*) Acute Bursitis, 13. All prepatellar.

(*c*) Tuberculous Tenosynovitis, 2. Ankle, 1; palm, 1.

(*d*) Ganglion, 2. Wrist, 2.

DISEASES OF THE OSSEOUS SYSTEM.

136. Periostitis.

Clavicle, 1; scapula, 1; femur, 1; tibia, 1; tibia and fibula, 1. Readmitted with necrosis, 1.

Fatal case.—Male, æt. 48. Multiple periostitis, no cause found; Wassermann reaction negative. Developed streptococcal arthritis of knee and died of pyæmia.

137. Osteomyelitis.

Humerus, 3; radius, 1; ulna, 1; carpus, 2; femur, 4; tibia, 2; fibula, 2; skull, 1; gummatous osteomyelitis of skull, 1; chronic osteomyelitis of femur, 1 Readmitted with necrosis, 2.

Fatal cases.

Male, æt. 1. Osteomyelitis of fibula; died of pyæmia.

Male, æt. 12. Osteomyelitis of tibia; died of amyloid disease.

Female, æt. 16. Osteomyelitis of femur; died of septicæmia.

138. Osteitis.

Tibia, 2; mandible, 2; superior maxilla, 1; osteitis deformans, 1. Previous admission, 1—chronic osteitis of superior maxilla in a girl, æt. 13.

139. Caries.

(*a*) Spinal.—Dorsal, 11; lumbar, 9; cervical, 3. Paraplegia in 3; abscess in 9. Also, appendicitis, 1; syphilis, 1; tuberculous dactylitis, 1.

Fatal case.—Female, æt. 19. Admitted with abdominal pain of 4 days' duration. Laparotomy and appendicectomy. Operation was followed by prolonged pyrexia, and crepitations became audible at the right base. Two months later a large abscess in the right lumbar region was opened and drained. P.M. —Spinal caries with abscess formation.

(*b*) Various.—Ilium, 1; femur, 2; tibia, 3; tarsus, 3; metatarsus, 1; humerus, 2; metacarpus, 1; phalanx, 1; rib, 5; sternum, 2. Readmitted, 4 (1 with necrosis).

140. Necrosis.

Mandible, 6; skull, 4; femur, 7; tibia, 4; hallux, 1; ulna, 1. Readmitted, 3

141. Tumours.

(*a*) Simple Tumours.—Fibroma of sacrum, 1; osteo-chondroma of pelvis, 1; osteoma of os calcis, 1; tibia, 2; femur, 2; toes, 2; skull, 1. Fibrocystic disease of femur, 1; sub-periosteal lipoma of skull, 1.

(*b*) Sarcoma.—Pelvis, 1; femur, 1; humerus, 1; skull, 2; general, 2. Chondro-sarcoma of femur, 1; osteo-chondro-sarcoma of pelvis, 1. Readmitted, 1. Treated with Coley's fluid, 2. Amputation of thigh in 2.

(*c*) Myeloid Sarcoma, 1. *Male, æt.* 25. Lower end of right radius affected. Tumour excised and replaced by a portion of rib bent to a right angle. Result good, but some abduction of the hand resulted.

(*d*) Carcinoma.—Os calcis, 1; no primary focus found. General carcinomatosis, 2; secondary to carcinoma of breast, 1.

142. Bones, Various.

Chronic abscess of tibia, 5; dermoid cyst of skull, 1; coccygeal dermoid, 1; sinus of tibia following plating of fractures, 2; granuloma of acromion process, 1; achondroplasia, 1; old decompression admitted for plating of skull, 1.

143. Affections of Amputation Stumps.

Septic stumps: Fingers, 7; thigh, 1.
Conical stump: Arm, 1. Re-amputation.
Painful stumps: Thigh, 2. Re-amputation.

DISEASES OF THE ARTICULATORY SYSTEM.

144. Shoulder.

(*a*) Tuberculosis, 2. Readmitted 1.
(*b*) Ankylosis, 2. Both resulting from injuries.

145. Elbow.

(*a*) Tuberculosis, 4. Readmitted, 1; amputation, 1; excision, 1.
(*b*) Ankylosis, 3. Arthroplasty in 1.
(*c*) Arthritis, Various, 4. Gonococcal, treated by vaccine, 2; acute arthritis, 1; chronic septic arthritis, 1. The case of acute arthritis was caused by the *B. influenzæ*.

146. Wrist.

(*a*) Tuberculous, 2. Arthrotomy and subsequent amputation in 1.
(*b*) Arthritis, Various, 4. Gonococcal, 1; syphilitic, 1; septic, 2.
(*c*) Various, 2. Ankylosis, 1; painful wrist, 1.

148. Hip.

(*a*) Tuberculous, 16. Abscess in 4; sinus in 2; erysipelas, 1; phimosis, 1; readmitted, 1.

Fatal case.—Female, æt. 18. Several previous admissions since 1911. Tuberculous hip, right; sinuses. Suppuration had extended through the acetabulum into the pelvis. Secondary hæmorrhage took place after exploration, and death

took place after a very prolonged illness, accelerated by amyloid degeneration of the viscera.

(*b*) Arthritis, Various, 9. Acute arthritis, 2; streptococcus, 1; *Staphylococcus aureus* and pneumococcus, 1 (fatal).

Female, æt. 6. Twelve hours' history of acute pain in the left hip with high pulse and temperature. Arthrotomy followed by treatment with pneumococcus vaccine. Death occurred two months later. P.M.—Cloudy swelling of viscera.

Suppurating peri-arthritis of hip, 1; chronic suppurative arthritis, 1; arthritis of hip and knee of obscure origin, 1; gonococcal arthritis treated by vaccine, 1; Charcot's joint, 1; osteo-arthritis, 2.

(*c*) Ankylosis, 3. Arthroplasty in 2.

(*d*) Various, 1. A case of functional hip in a female, *æt.* 9.

149. Knee.

(*a*) Tuberculous, 20. Abscess in 3. Readmitted, 3. Treated with injection of 4 per cent. formalin, 1.

(*b*) Synovitis, 8. Acute, 1; chronic, 7. Traumatic in 6. Bilateral in 2. Readmitted, 1.

(*c*) Arthritis, Various, 13. Acute septic arthritis, 2—amputation in both; gonococcal, 2; syphilitic, 1; osteo-arthritis, 6; Charcot's joint, 1; Baker's cyst, 1. Readmitted, 3.

Fatal case.—Female, æt. 53. Acute suppurative arthritis following removal of loose bodies from an osteo-arthritic knee.

(*d*) Ankylosis, 3. Amputation in 1.

(*e*) Internal Derangement, 41. Excision of internal semilunar cartilage, 26; removal of loose bodies, 6; excision of synovial fringe, 3; shortening of crucial ligaments, 2. Also varicocele, 1.

(*f*) Various, 4. Wandering synovial cyst, 1; painful knee, 3.

150. Ankle and Tarsus.

(*a*) Tuberculous Ankle, 7. Amputation in 4.

(*b*) Tuberculous Tarsus, 1. Curetted.

(*c*) Various, 5. Gonococcal arthritis of ankle, 2; ankylosis of tarsus, 1; suppurative arthritis of ankle, 1, and of ankle and tarsus, 1; both fatal, one dying of septicæmia and the other of pneumonia.

151. Joints, Various.

Osteo-arthritis of spine, 8; ankylosis of jaw, 2; arthroplasty in both; internal derangement of temporo-maxillary joint, 1; acute arthritis of sterno-clavicular joint, 1; osteo-arthritis of sterno-clavicular joint, 1; septic arthritis of inter-phalangeal joints, 2.

Also acute mastoiditis, 1.

DEFORMITIES.

152. Talipes.

(*a*) Congenital. Equinus, 1; equino-varus, 6; equinus and cavus, 1; varus, 1. Readmitted, 2.

(*b*) Paralytic. Equinus, 7; equino-varus, 2; valgus, 2.

153. Torticollis.

(*a*) Congenital, 4. Sterno-mastoid and deep fascia divided in all.

(*b*) Various, 3. Ocular, 1; following scarlet fever, 1; rheumatic, 1.

154. Genu Valgum.

Bilateral in 7. Osteotomy of femur in 3.

155. Cicatricial Contracture.

Following burns, 5 (fingers 3, elbows 1, axilla 1). Following cellulitis of hand, 2. Dupuytren's contracture, 3.

156. Hammer Toe.

Bilateral in 8.

157. (*a*) Pes Planus, 13. Bilateral in 9. Gonorrhœal, 1.

(*b*) Pes Cavus, 2. Bilateral in 1. Tendon lengthening in 1.

(*c*) Hallux Valgus, 7. Bilateral in 5. Also pes planus, 1; hammer toe, 1.

(*d*) Hallux Flexus, 1. Arthroplasty.

158. Deformities, Various.

(*a*) Secondary to Paralyses.—Infantile paralysis in all.

(*b*) Resulting from Rickets.—Osteotomy of tibia in 1.

(*c*) Coxa Vara.—Von Mickulicz's operation in 1.

(*d*) Scoliosis, 3.

(*e*) Various.—Flexion deformity of knee following arthrodesis, 1; congenital deformity of fingers, 2; deformity of toes, 1.

MALFORMATIONS.

159. Hare Lip and Cleft Palate.

Hare lip, 6; cleft palate, 30; both, 7.

Fatal cases.—Died after operation, 2 *girls, æt.* 1 and 6 respectively. The former died of convulsions and the latter of enteritis.

160. Malformations of Head and Neck.

(*a*) Meningocele.—Meningocele, 1; hydrencephalocele, 1. Both fatal.

(*b*) Cervical Ribs.—Bilateral in 3; excision in 7.

(*c*) Various.—Microcephaly, 2; decompression in 1; branchial fistula, 2; thyro-glossal fistula, 1; aberrant thyroid, 1. Also deflected septum, 1; necrosis of fibula, 1.

161. Malformations of the Trunk.

(*a*) Imperforate Anus, 2. Incision in both.

(*b*) Spina Bifida, 5. Excision of sac in 3. 2 fatal cases; both died of septic meningitis.

(*c*) Hypospadias, 3. Plastic operations in 2.

(*d*) Various, 2. Ectopia vesicæ (fatal), 1; congenital deficiency of sternum, 1.

162. Malformations of the Limbs.

Congenital dislocation of hip, 6. Tenotomy of adductors.

DISEASES OF THE AUDITORY SYSTEM.

163. Chronic Otitis Media with Mastoiditis.

No operation in 15. Also nasal polypi, 1; gonorrhœa, 1.

164. Acute Mastoiditis.

Recoveries included extradural abscess, 1; facial paralysis, 2; erysipelas, 1 1 case, that of a boy, developed septic meningitis, but was removed by his parents and died at home.

Fatal cases.

Female, æt. 16. Acute mastoiditis and cerebellar abscess. Antrotomy. P.M.—Basal meningitis.

Female, æt. 14. Acute mastoiditis and extradural abscess. Antrotomy. P.M.—Suppurative meningitis.

Female, æt. 14. Acute mastoiditis. Antrotomy. P.M.—Suppurative meningitis. A temporo-sphenoidal abscess had ruptured into the lateral ventricle.

Female, æt. 13. Acute mastoiditis and extradural abscess. Antrotomy. P.M.—Sinus thrombosis, cerebellar abscess, suppurative meningitis and pyæmia.

165. Auditory, Various.

(*a*) Acute Otitis Media, 6. Bilateral in 1.

(*b*) Various, 4. Deafness due to concussion, 2; deafness due to old fractured base, 1; external otitis, 1.

DISEASES OF THE NERVOUS SYSTEM.

166. Cerebral Hæmorrhage.

5 cases, all of them fatal.

(1) *Male, æt.* 60. Several fits with temporary loss of power in left hand and arm during the last 8 years. Sudden loss of consciousness with right hemiplegia 48 hours before admission. P.M.—Cerebral ventricles flooded with blood. Renal heart. No valvular disease. Granular kidneys.

(2) *Female, æt.* 52. History of a fainting attack 9 months ago. Found unconscious day of admission. Blood pressure, 175 mm. Hg. Pin-point pupils. Temperature 109° F. before death. P.M.—Large clot in the left hemisphere which had burst into the lateral ventricle. No pontine hæmorrhage. Vessels grossly diseased.

(3) *Female, æt.* 46. Been attending eye-department for some years for retinitis following albuminuria of pregnancy. Died suddenly in Casualty. P.M.—Renal heart; no endocarditis; adrenals weighed 9 drs. Hæmorrhage in left corpus striatum. Granular kidneys.

167 (*a*) Cerebral Thrombosis.

3 cases, 1 fatal.

Fatal case.—Female, æt. 68. Two years ago had a "stroke." Left leg had been amputated for senile gangrene. Gradual onset of left hemiplegia during the last 24 hours. Almost comatose on admission and died a few hours later. P.M.—Gross disease of vessels at the base of the brain. Softening in the left

cerebellar hemisphere and right occipital lobe. Heart hypertrophied. No endocarditis or nephritis.

(*b*) Cerebral Embolism.

1 non-fatal case. *Male, æt.* 57. Known to have had mitral stenosis for 4 years. Sudden right hemiplegia and aphasia without loss of consciousness just before admission.

168. Cerebral and Spinal Syphilis.

33 cases, of which 23 were cerebral, 1 was spinal, and 9 were cerebro-spinal. 2 cases were readmitted. Definite history of infection in 10 cases. The interval between the date of infection and the onset of the present symptoms varied from 6 months to 20 years, the average being 7 years. Wassermann reaction positive in the blood in 27 cases and negative in 4. The reaction was positive in the cerebro-spinal fluid in 9 cases and negative in 8. In only 2 cases where the blood gave a negative reaction was the cerebro-spinal positive. Wassermann negative in 3 cases in both blood and cerebro-spinal fluid. A lymphocytosis was present in 10 and absent in 6. Noguchi's test positive in 8 and negative in 5.

Treatment.—Salvarsan, usually followed by mercurial inunction in 23 cases. 1 of these had one injection of salvarsanised serum. Mercurial inunction and potassium iodide by mouth in 4; mercurial inunction only in 2. Mercury and potassium iodide by mouth was the only treatment in 1 case.

Cases of interest.

(1) *Male, æt.* 28. Contracted syphilis a year ago, and a month after the date of infection started treatment. Had 4 doses of salvarsan but no mercury. Admitted in a stuporous state with a 3 weeks' history of severe headaches, diplopia, vomiting, and increased drowsiness. Scalp tender; high degree of optic neuritis. Left ptosis. Weakness of both external recti. Deficient upward movement in both eyes. Pupils equal and active. Right hemiparesis. Wassermann reaction positive. Had another injection of neo-salvarsan, mercurial inunctions, and iodide by mouth. Five weeks later condition much improved and a second Wassermann was negative.

(2) *Male, æt.* 17. Had gonorrhœa some months ago, but there was no history of syphilis. Three weeks' history of vomiting, headache, ataxia, and diplopia. Falls to the left. Nystagmus in both directions but slower to the left. Supranuclear weakness left facial. No optic neuritis. Pupils equal and active. Jerks brisker on the left side. Wassermann reaction positive. Had 2 injections of neo-salvarsan, and mercurial inunction. Discharged 5 weeks later practically cured.

169. Cerebral, Various.

(*d*) 4 cases of paralysis agitans; one of these patients had, in addition, a hemianæsthesia which was thought to be functional.

(*e*) Cerebral Diplegia, 2 cases.

Male, æt. 12. Difficult labour. Intellect impaired. Microcephalic. Athetosis. Spastic limbs. Increased jerks. Plantars, extensor. Extreme degree of hyperextension of fingers in which the metacarpo-phalangeal and proximal interphalangeal joints shared.

170. Chorea.

20 cases. Mitral disease present in 10. Past history of rheumatism in 6 in addition to 2 cases where the present attack was complicated with acute rheumatism. 9 of the cases had had 1 or more attacks of chorea, and 2 of those admitted during the first attack were readmitted with a recurrence of symptoms. Family history of chorea in 1. Rheumatic nodules present in 1 case. 1 patient was pregnant. In 1 case the attack followed tonsillectomy; in another, scarlet fever; and in a third case a fright seemed to have been the exciting cause.

Case of interest.—Male, æt. 8. Chorea a year ago. Complained of headaches for last 2 weeks, and 4 days ago had epistaxis and vomited. Just able to stand. Knee-jerks absent. Plantar response flexor. Slight twitching movements of toes, fingers, and tongue. No muscular wasting. Incontinence of urine for the first few days. Nine days after admission the knee-jerks had returned, and 10 days later patient was discharged practically well.

171. Disseminated Sclerosis.

23 cases, 1 fatal. Wassermann reaction negative in the 7 cases where the test was applied. The length of history varied between 9 weeks and 6 years, but the majority had the initial symptom during the 12 months preceding admission.

Fatal case.—Male, æt. 26. Eleven months' history of vertigo and weakness of the legs, during which time there had been definite remissions. Staccato speech. Nystagmus. Marked intention tremor. Exaggerated jerks. Ankle and patellar clonus easily obtained. Abdominal reflexes absent. Extensor plantar response. Incontinence of urine and fæces. Admitted with a bed-sore. Patchy anæsthesia on trunk. Wassermann negative. Developed cystitis. Died 3 months after admission. P.M.—No trace of meningitis. Histological examination revealed areas of sclerosis in pons, medulla, cervical, thoracic, and lumbar regions of the cord. Marked chromatolysis of Nissl's granules, proliferation of neuroglial cells, and perivascular infiltration. No changes in cerebral cortex or mid-brain.

172. (*a*) Idiopathic Epilepsy.

17 cases. Wassermann reaction negative in 4 and positive in 1. Definite history of head injury, presumably the cause of the convulsions in 6.

(*c*) Convulsions.—3 cases, 1 fatal.

Fatal case.— Girl, æt. 5. History of headache followed by convulsions during the 24 hours preceding admission. No previous history of fits. The latter were constantly repeated, and the child died 2 days after admission. P.M.—All viscera healthy. No trace of disease found in central nervous system histologically.

173. Neurasthenia and Hysteria.

56 cases. Neurasthenia, 25; traumatic neurasthenia, 5; hysteria, 3; traumatic hysteria, 1; functional abdominal pain, 8; dyspnœa, 2; spasm of limbs, 3; ataxia, 1; torticollis, 1; purpura, 1; hemiplegia and scleroderma, 1; anorexia nervosa, 1; aerophagy, 1; alcoholic psychosis, 1; hysterical joints, 2.

174. General Paralysis.

12 cases, all in males. The age varied between 31 and 50. In only 1 case was a history of syphilis obtained—infected 16 years before present symptoms

began. Wassermann reaction on blood positive in 8, negative in 3. On cerebro-spinal fluid the reaction was positive in 4 and negative in 3. Noguchi's test positive in 4 and negative in 1. Lymphocytosis present in all 6 cases where the necessary examination was made. In 2 cases the Wassermann reaction on both blood and cerebro-spinal fluid was negative, but in each of these cases there was a lymphocytosis. Treatment: Salvarsan in 7; mercurial inunction in 1; intraventricular injection of salvarsanised serum in 1. In the latter case the patient was discharged too soon to allow of any definite opinion being formed as to the result of the treatment.

175. Hemiplegia.

4 cases. 1 case of infantile hemiplegia. 2 were probably due to cerebral hæmorrhage, and 1 was possibly a case of disseminated sclerosis. Wassermann reaction negative in all the adult cases.

176. Anterior Poliomyelitis.

10 cases, 4 fatal.

Fatal cases.

(1) *Male, æt.* 28. Three days' history of malaise and vomiting followed by rapid loss of power, affecting in turn the legs, trunk, arms, and face. Just able to move fingers and toes; all jerks absent. Plantars flexor. Retention of urine. No sensory loss. Difficulty in articulation. Twitching of face. P.M.—Cord and brain only examined. Microscopically changes of acute anterior poliomyelitis present throughout the cord, especially well marked in cervical region, also in pons, dorsal and lumbar segments of cord.

(2) *Male, æt.* 6. Twelve hours' history of sudden vomiting followed by coma and spasticity of legs. Pupils unequal and inactive; knee-jerks brisk; plantars extensor; ankle clonus on right side; arms and legs spastic; retention of urine; no sensory loss. Died in coma a few hours after admission. P.M.—Viscera healthy. No meningitis. Histological examination of cord showed marked chromatolysis of Nissl's granules in the cortex, thalamus, and medulla. Cord not examined.

(3) *Girl, æt.* 9. History of pain in neck starting 3 days ago and followed 24 hours later by pain and loss of power in the right arm. On admission, in addition to the arm weakness, there was inability to raise the head. All jerks in the right arm were absent, otherwise examination of central nervous system was negative. P.M.—Viscera healthy. Microscopical report: "Pronounced poliomyelitis throughout the cord, best marked in the cervical enlargement. Similar changes found in pons, medulla, and traces in the right corpus striatum. No disease in the cortex."

(4) *Male, æt.* 4½. Seven weeks ago sore throat and nasal discharge, followed by regurgitation of food and weakness of legs. Complete recovery from this illness. Five days ago vomited and had pain in the back of the neck. Next day, unable to stand and arms became weak. No sphincter loss; sensation normal; all jerks in arms and legs absent; plantars flexor; poor action of diaphragm. Died from respiratory failure 5 days after admission. P.M.—Basal collapse of lungs. Microscopically extensive poliomyelitis was discovered, most marked in cervical and lumbar regions of cord. Similar changes through pons and medulla up to the corpus striatum.

177. Intracranial Tumour.

21 cases, 6 of them fatal. All the latter and 11 of the non-fatal cases were in males. Site: Cerebellum, 6; parietal lobe, 4; midbrain, 2; pons, 1; frontal lobe, 1; temporo-sphenoidal lobe, 2; cyst in third ventricle, 1; cerebral and spinal tumour, 1; situation undetermined, 3. Variety: Glioma, 4; glio-sarcoma, 1; cyst (nature undetermined), 1.

Treatment.—Decompression in 4 fatal and 7 non-fatal cases.

Cases of interest.

(1) *Male, æt.* 6½. Two months' history of attacks of vomiting and headaches, accompanied by wasting. Sight failing for 2 weeks. Intense optic neuritis. Right ptosis and external strabismus. Subtemporal decompression, followed by what was thought to be an enormous hernia cerebri. Died 3½ months after operation. P.M.—The "hernia" proved to be an enormous neoplasm, and was slightly larger than the head. Microscopical report, glioma.

(2) *Male, æt.* 5. Headaches for last 3 months. Sudden coma 4 hours before admission. Jerks present; plantars extensor. Pupils widely dilated and inactive. No excess of cells in cerebro-spinal fluid. Died soon after admission. P.M.—No meningitis. Both lateral ventricles greatly distended with fluid. Foramina of Munro markedly enlarged. Third ventricle dilated and contained a cyst about one inch in diameter. It was attached by a broad pedicle to the right lateral wall of the ventricle. Its proximal surface blocked the entrance of the Sylvian aqueduct.

(3) *Male, æt.* 14. Suffered during the last year from headache, giddiness, and dimness of vision. Occasional vomiting after food. Falls to the left. Optic neuritis. Nystagmus slower to the right. Nuclear weakness of right sixth. Infranuclear weakness right seventh. Fifth and eighth, tenth and eleventh nerves also affected. Right knee-jerk brisker than left. Ankle-jerks absent. Analgesia third, fourth, fifth sacral. Retention of urine. Wassermann negative. X ray of spine negative. Developed cystitis and died 4½ months after admission. P.M.—Suppurative cystitis and nephritis. Diffluent new growth at the right cerebellar-pontine angle. Lower end of cord swollen. Microscopical report: "Glio-sarcoma; tumour fades off into a general gliosis of the medulla round the central canal, which could be traced all down the cord; just above the filum terminale it again assumed the appearance of a glioma."

178. Tuberculous Meningitis.

17 fatal cases. Cerebro-spinal fluid examined in 13 cases; lymphocytosis in 12; no cells seen in 1. 2 cases were thought to be syphilitic meningitis, but the Wassermann reaction on the cerebro-spinal fluid was negative in both, and the autopsy revealed well-marked tuberculous meningitis in both cases. Tubercle bacilli in sputum in 1 case. Enteric suspected in 2 cases; both gave a negative Widal reaction. No P.M. in 4 cases.

Cases of interest.

(1) *Male, æt.* 9. Admitted 5 years ago for concussion. Occasional headaches last 2 years. Vomiting, irritability, photophobia, and severe headache for last 5 days. Optic neuritis, "probably recent." Marked meningeal symptoms. Excess of small lymphocytes in cerebro-spinal fluid. P.M.—Caseating mediastinal glands. Tuberculous broncho-pneumonia. Dura adherent over an area

the size of a shilling just in front of the vertex. Tuberculous meningitis. Three caseating tuberculous masses found in the brain tissue.

(2) *Male, æt.* $1\frac{5}{12}$. Right wrist painful and swollen for 1 week; left wrist similarly affected for the last two days. The right wrist was incised and drained, as it was thought to be a suppurative arthritis. Meningeal symptoms developed 3 weeks later, also thought to be suppurative. P.M.—Tuberculous meningitis. Caseous bronchial glands. Tubercles on liver, spleen, and kidneys. Wrist probably tuberculous.

179. Meningitis (Non-Tuberculous).

13 cases, 11 fatal. Cerebro-spinal fluid examined in 11; pure culture of meningococcus grown in 2; cultures sterile, polynuclear cells present, and many intracellular diplococci in 1; streptococcus in 1; *Staphylococcus aureus* in 1; influenzal bacillus in 1; lymphocytosis and positive Wassermann reaction in 1; polynuclear cells in 2; pus cells and Gram negative bacilli in 1; excess of small lymphocytes, cultures sterile, in 1; excess of lymphocytes and polynuclear cells, cultures sterile, in 1. No P.M. in 2 cases of post-basic meningitis.

Cases of interest.

(1) *Male, æt.* 2. Family history of tubercle. Five days ago started vomiting and became drowsy. Neck stiff. No abdominal retraction. Kernig's sign absent. All jerks increased. Plantars extensor. Cerebro-spinal fluid turbid; cells chiefly polynuclear; cultures sterile; many intra-cellular diplococci. Treatment: Urotropin by mouth. Recovery.

(2) *Male, æt.* 20. History of vomiting 8 days ago, followed by persistent frontal headache. Bowels constipated. Abdomen normal. Spleen not felt. Widal negative. Blood-culture sterile. Lumbar puncture 4 days after admission: "Pus present; cultures sterile; 65 per cent. polynuclear cells; small lymphocytes 35 per cent.; no tubercle bacilli." X ray of skull showed no fracture. Patient had 3 sudden rises of temperature, with exacerbation of headache. A second lumbar puncture was performed, and he was given urotropin by mouth. Recovery.

(3) *Male, æt.* $\frac{8}{12}$. Convulsions and vomiting every day for the last 6 weeks. Hydrocephalic. Head markedly retracted. Abdomen retracted. Kernig's sign positive. Meningeal cry. Wassermann reaction positive in cerebro-spinal fluid, which contained an excess of small lymphocytes. Treatment: Mercurial inunction. Died 11 days after admission. P.M.—No obstruction to foramen of Majendie. No spinal meningitis. Extensive milky leptomeningitis. Brain substance normal. Marked thickening of walls of cerebral vessels. Chronic splenitis. Small nodule in liver, shown histologically to be due to fatty degeneration; vessels thickened.

181. Neuralgia and Sciatica.

Trigeminal neuralgia, 8; sciatica, 12; brachial neuralgia, 2; brachial neuritis, 4. Trigeminal: 4 cases treated by alcohol injections. Of these 1 had had the roots divided by the pterygoid route 12 years ago; recurrence of pain last 6 months. Another had had injections of alcohol in 1913 which had given relief for three or four months. Division of inferior dental nerve in 1 case. Gasserian ganglion removed in 2 cases; both had previously had two injections of alcohol which failed to relieve the pain.

Cases of interest.

(1) *Male, æt.* 29. A soldier recently sent back from the front on account of weakness in both arms. No pain. Numbness and tingling in the fingers. Double wrist drop. Triceps, pronators, deltoids, and serratus weak and wasted. Some anæsthesia to pin-pricks over the front and outer sides of both upper arms. Condition the result of pressure of a heavy kit. Improved rapidly with massage.

(2) *Male, æt.* 31. A soldier with similar symptoms to the preceding case. Left arm only affected. Motor weakness and sensory loss corresponding with roots C5 to C7. Massage and faradism soon had a beneficial effect.

183. Polyneuritis.

(*a*) Alcoholic.—7 cases. Cirrhosis of liver in 2, history of hæmatemesis in 1.

(*b*) Post-diphtheritic.—2 cases. Both recovered.

184. Tabes.

24 cases, 3 of them in women. Neo-salvarsan given in 15 cases. Definite history of syphilis in 11 cases, the interval between infection and the onset of tabetic symptoms varying between 8 and 31 years; average 16 years. The first symptom was lightning pains in 11; gastric crisis in 5; rectal crisis in 1; impotency, 1; ataxia, 1; girdle sensation, 1; diplopia, 1; perforating ulcer, 1; Charcot's joint, 1; optic atrophy, 1. There was 1 case of juvenile tabes in a man, æt. 23. 2 of the cases with gastric crises had had a gastro-enterostomy performed elsewhere.

Complications.—Charcot's joint in 3; perforating ulcer in 2; gastric crises in 6; rectal crisis in 1.

Wassermann reaction in blood positive in 8, negative in 10; in cerebro-spinal fluid positive in 2, negative in 10. Noguchi's reaction positive in 4 and negative in 5. Lymphocytosis present in 7 and absent in 5. In 7 cases Wassermann reaction was negative in both blood and cerebro-spinal fluid, 1. In 5 of these Noguchi's test was applied and gave a negative result in all 5 cases. In 3 out of these 7 cases a lymphocytosis was present and in 4 absent in the cerebro-spinal fluid.

Cases of interest.

(1) *Male, æt.* 46. Syphilis 30 years ago. For the last 5 years had had attacks of pain in the rectum, intensified by defæcation. Admitted as a case of carcinoma of rectum. No growth felt *per rectum*. Argyll-Robertson pupils. Knee- and ankle-jerks present. Anæsthesia over the ulnar borders of the forearms. Wassermann reaction negative in both blood and cerebro-spinal fluid. Noguchi negative. No lymphocytosis.

(2) *Male, æt.* 27. Syphilis denied. Two laparotomies before admission. Nothing was done at the first operation, gastro-enterostomy performed at the second. Argyll-Robertson pupils. Knee-jerks present. Wassermann reaction positive in the blood, negative in the cerebro-spinal fluid. Noguchi's test positive. Lymphocytosis present.

(3) *Male, æt.* 38. Syphilis denied. Lightning pains in the legs for 3 months. Argyll-Robertson pupils. Charcot left metatarsus, confirmed by X rays. Ankle-jerks absent. Knee-jerks brisk. Wassermann reaction in blood positive. Had 3 injections of neo-salvarsan and mercury by mouth. Ten weeks after being discharged was readmitted with gastric crisis, and had 2 more injections of neo-

salvarsan. He was discharged and again readmitted a month later with a Charcot of the right metatarsus. Wassermann reaction still positive after a 6th injection of neo-salvarsan. Shortly after leaving the hospital he turned up again with severe gastric crises and was sent to Queen Square.

(4) *Male, æt.* 23. Progressive failure of vision for the last 5 years. Weakness of legs and alteration in speech noticed for 3 years. Extreme degree of primary optic atrophy. Mentally deficient. Inactive pupils. Left knee-jerk absent. Wassermann reaction positive.

185. Various Nerve Diseases.

(*a*) Syringomyelia.—1 case in a woman, *æt.* 42, was treated by laminectomy, and 2 cysts in the cord were tapped. Result: *nil* in arms, power in the legs slightly improved, patient just able to walk.

(*d*) Progressive Muscular Atrophy.

(1) *Male, æt.* 18. Insidious and painless onset of weakness in both arms. Thenar eminences, interossei, extensors of wrist, triceps and deltoids affected. Fibrillary twitching seen in both arms and in the pectorals. Electrical reactions normal. Knee-jerks rather brisk. X rays, no cervical ribs. Improved so much with massage and faradism that it was thought that the progressive muscular atrophy might have been secondary to an old anterior poliomyelitis.

(2) *Male, æt.* $\frac{3}{12}$. Increasing weakness of limbs and dyspnœa since he was a month old. Normal labour. Fontanelle only admitted the tip of the little fingers. Unable to turn in bed or lift his head. Only diaphragmatic respiration. Extreme internal rotation of arms; elbows flexed, forearms pronated. Knees slightly flexed. All muscles of limbs and trunk much weakened, the proximal being more affected than the distal muscles. Apart from movements of the fingers and toes the child lay motionless. Developed broncho-pneumonia and died. Diagnosis confirmed by P.M. findings and histological examination of cord and muscles.

(*f*) Spinal Tumour.

Male, æt. 43. Ten months' history of gradually increasing paraplegia with loss of sphincter control. Syphilis denied. Wassermann negative. Anæsthesia below 3rd rib. Ankle and knee-jerks exaggerated. Double ankle clonus. Extensor plantar response. Condition too bad to allow of surgical interference. Developed cystitis and died. No P.M.

INJURIES.

186. Injuries of the Head.

(*a*) Fractured Vault of Skull, 10. Compound in 4; decompression in 4. All the cases operated upon recovered. There were 5 fatal cases; intracranial hæmorrhage, 1; meningitis, 2; numerous other injuries, 2.

(*b*) Fractured Base of Skull, 9. Recoveries, 5. Anterior fossa, 1; middle fossa, 3; posterior fossa, 1.

Fatal cases, 4. Fractured vault and base with cerebral laceration, 1; contusion of liver, 1; fractured ribs, 2.

(*c*) Fractured Mandible, 7. Fragments wired, 3. Compound fractures due to bullet or shell wounds, 3.

(*d*) Fractured Nose, 1. Followed by necrosis of nasal bones.

(*e*) Concussion, 50. Cerebral irritation, 2; functional aphonia, 1; cellulitis of scalp, 1; fractured clavicle, 1.

(*f*) Wounds of Scalp and Face, etc., 33. Fractured ribs and pneumonia, 1; concussion, 4; injuries to the eyes, 9; injuries to the teeth, 1; bullet and shell wounds of scalp and face, 20. Perforating bullet wounds of head, 2.

Male, æt. 49. Suffering from Jacksonian fits as the result of a bullet wound. Exploration and removal of bullet. Recovery.

Male, æt. 50. Shot himself above the right ear. Exploration and decompression. Death in 24 hours. P.M.—The bullet lay between the dura and skull on the opposite side; a hæmorrhage had taken place into the ventricles.

187. Injuries of the Neck.

Contusion, 1; bullet and shell wounds, 3; cut throat, 4.

Fatal case.—Male, æt. 42. Cut throat. Suture and tracheotomy. Death due to broncho-pneumonia.

188. Injuries of the Upper Extremity.

(*a*) Fractured Clavicle.—Compound, 1; also fractured fibula, 1.

(*b*) Fractured Scapula.—Bullet and shell wounds, 2. Wounds explored in both, and bullet removed from 1.

(*c*) Humerus.—Fracture dislocation of shoulder, 3; fracture of great tuberosity, 1; fracture of surgical neck, 5; fracture of shaft: upper third, 3; middle third, 10; lower third, 2; supracondylar fracture, 19; fracture of capitellum, 3; fracture of internal epicondyle, 1. Fracture due to bullet or shell wound, 6. Compound fracture in 7. Musculo-spiral paralysis in 2. Also: compound fracture of radius and ulna, 1; bullet wound of foot, 1; inguinal hernia, 1.

Fatal case.—Male, æt. 27. Fractured humerus and fractured base.

(*d*) Fractured Radius and Ulna.—Radius: Fracture of upper third, 3; middle third, 6; lower third, 7; Colles' fracture or epiphyseal separation, 4. Ulna: Fracture of olecranon, 12; upper third, 2; middle third 4; lower third, 6. Radius and ulna fractured simultaneously in 9. Compound fracture in 9. Fracture due to bullet or shell wound in 9. Also: fractured metacarpal, 1; scaphoid, 1; metatarsal, 5; mandible, 1; dislocation of elbow, 1.

(*e*) Fractured Carpals, Metacarpals, and Phalanges.—Fractured scaphoid, 4; metacarpals, 14; phalanges, 3. Compound fracture in 16. Fracture due to bullet or shell wound, 16. Also: Bullet wound of face, 1; chest wall, 1; dislocation of semilunar, 1.

(*f*) Injuries of the Soft Parts, etc.—Cut tendons, 10; cut radial artery, 1; lesions of musculo-spiral nerve, 1; median nerve, 1; ulnar nerve, 3.

Various injuries to: Shoulder, 29; arm, 32; forearm, 13; hand, 27. Injuries due to bullet or shell wounds in 89.

Also, otitis media, 2; cut head, 1; laceration of foot, 1; bullet wounds of leg, 1; thigh, 1; head, 1. Varicose veins, 1.

Fatal cases.

Male, æt. 35. Run over by a train. Avulsion of arm, fractured patella, fractured os calcis, fractured base and ribs.

Female, æt. 1. Lacerated arm and foot. Died of septicæmia.

189. Injuries of the Thorax.

(*a*) Fractured Ribs.—Surgical emphysema, 1; pneumothorax, 1; due to bullet wound, 1; fatal, 2—œdema of lungs, 1; pulmonary embolism, 1.

(*b*) Various.—Bullet or shell wounds, 5; contusion, 4; traumatic hæmothorax, 1.

190. Injuries of the Abdomen.

(*a*) Ruptured Viscera.—Liver, 1, recovery after laparotomy; pancreas, 1, died after laparotomy. 2 other cases had multiple injuries, and died without operation.

(*b*) Wounds.—Bullet and shell wounds, 4. Cut throat and stab wound of abdomen, 1.

Male, æt. 36. Stab wound completely dividing transverse colon; cut throat. Laparotomy and suture of colon; suture of throat. Recovery.

191. Injuries of the Genito-urinary System.

(*a*) Injuries of the Kidney.—Contusion, 3; retroperitoneal rupture, 1.

(*b*) Injuries of the Urethra.—External urethrotomy and suture, 1.

(*c*) Injuries of the Testis.—Contusion, 1.

192. Fractures of the Pelvis.

Recovered, 4. Fractured iliac crest, 3; fractured acetabulum, femur driven through, 1.

Died, 2. Both died of shock and hæmorrhage shortly after admission.

193. Injuries of the Lower Extremity.

(*a*) Fractured Femur.—Great tuberosity, 1; neck, 4; inter-trochanteric, 1; upper third, 10; middle third, 12; lower third, 9. Involving the knee-joint, 2. Compound in 2. Caused by delivery, 1. Bullet and shell wounds, 3. Also fractured radius and ulna, 2.

Fatal case.—Male, æt. 28. Compound comminuted fracture of femur and extensive destruction of arm as a result of the explosion of a shell. Died of septicæmia.

(*b*) Fractured Patella.—Wired, 19; re-wired, 3.

(*c*) Fractured Tibia and Fibula.—Upper third, 5; middle third, 7; lower third, 25. Compound in 11. Caused by bullet or shell wounds, 1. Readmitted with necrosis, 1. Re-fracture, 1. In 1 case the fibula was fractured at its middle, and the tibia in two places above and below. Also fractured radius, 1; fractured metatarsals, 2.

Fatal cases.—Septicæmia, 1; multiple injuries, 1.

(*e*) Fractured Tibia.—Head, 3; spine, 2; upper third, 1; middle third, 3; lower third, 3; internal malleolus, 2. Compound in 1. Also fractured os calcis, 1.

Fatal case.—Male, æt. 47. Femoral thrombosis and pulmonary embolism.

(*f*) Fractured Fibula.—Upper third, 1; middle third, 1; lower third, 2;

external malleolus, 2; Dupuytren's fracture, 2. Compound in 2. Caused by bullet or shell wounds, 2.

(*g*) Fractured Tarsals, Metatarsals, and Phalanges.—Os calcis, 2; astragalus, 1; cuboid, 1; scaphoid, 1; metatarsal, 5; phalanx, 1. Compound in 6. Fracture caused by bullet or shell wound in 6.

Also, fractured clavicle, 1.

(*h*) Injuries of the Soft Parts, etc.—Cut or ruptured tendons, 6. External popliteal paralysis, 1. Various injuries of: buttock, 8; thigh, 43; knee, 8; leg, 19; foot, 14. Bullet and shell wounds, 74. Also hæmorrhoids, 1; varicose veins, 1.

194. Injuries of the Spine.

(*a*) Fracture Dislocations.—Dorsal, 2; cervical, 1. Laminectomy, 1. Paralytic ileus in 1; hæmatomyelia, 1.

(*b*) Wounds.—All produced by bullet or shell.

(*c*) Contusions.—Hæmatomyelia, 1.

195. Injuries of the Joints.

(*a*) Shoulder.—Dislocation, 3; sprain, 1.

(*b*) Elbow.—Dislocation, 2.

(*d*) Carpal and Phalangeal Joints.—Also fracture of the radius, 1.

(*e*) Hip.—Fracture dislocation, 1.

(*f*) Knee.—Bullet or shell wounds, 3; removal of foreign bodies in 3.

(*g*) Ankle.—All sprains.

196. Injuries of Nerves.

Brachial plexus, 3; fall on shoulder, 2; concussion, 1. Serratus palsy, 1. Following operation for removal of cervical rib, performed elsewhere. Median, 1. Incised wound above the wrist. Ulnar, 3. Old fractured olecranon, 1; coronoid, 1; bullet wound, 1. External popliteal, 1. Incised wound of popliteal space.

197. Malunited and Ununited Fractures, etc.

Scapula, 1; humerus, 7; radius and ulna, 2; Colles' fracture, 1; olecranon, 1; skull, 1; femur, 1; patella, 2; tibia and fibula, 3; tibia, 2; astragalus, 1.

198. Burns and Scalds.

Burns, 16; scalds, 7; cordite, 1; alkali, 1; fatal cases, 7.

199. Poisons.

9 cases, 1 fatal.

200. Unclassified.

(*d*) Pain.—Dorsal and lumbar, 9; intercostal, 1; crural, 1; perineal, 1; brachial, 2.

(*e*) Various.—Edentulism, 2; keratitis, 1; choroidal degeneration, 1; gonorrhœal iritis, 1; old tuberculous knee, 1; septic wounds following appendicectomy elsewhere, 2; insomnia, 1; alcoholism, 2; food poisoning, 1; old concussion, 1; old Mediterranean fever, 1; tænia, 2; malingering, 2; idiocy, 1; imbecility, 4.

REPORT OF MARY WARD.

There were 516 cases admitted to the ward during the year, and of these 504 were delivered, 10 discharged undelivered, and 2 were delivered before admission.

188 were primigravidæ, and 328 multiparæ.

There were 414 cases of normal labour. Of these 394 were vertex presentations, L.O.A. 221, R.O.A. 142, R.O.P. 18 (8 unreduced), L.O.P. 13 (4 unreduced); 8 were breech presentations, L.S.A. 4, R.S.A. 2, R.S.P. 1, L.S.P. 1; 2 were face presentations, both L.M.A.; 5 were twin pregnancies, 3 vertex and breech, 2 both breech; 5 were born in the receiving room.

514 children were born during the year.

Males:	233 mature,	11 of which were stillborn	and 2 died.	
	25 premature,	13 ,,	,,	3 ,,
Females:	230 mature,	5 ,,	,,	1 ,,
	26 premature,	10 ,,	,,	3 ,,

Of the abnormal cases there were—

Eclampsia.—10 cases: 8 ante-partum, 2 post-partum. Of the former 2 died.

(*See table on p.* 116.)

Albuminuria.—9 cases, 7 of which were delivered in hospital and 2 sent home undelivered. All cases recovered.

Hyperemesis Gravidarum.—2 cases. In 1 case vomiting did not commence till about the 36th week of pregnancy. On admission 2 weeks later condition was bad, with acetonuria and marked drowsiness. However, infusion with normal saline 1½ pints containing 3 drachms of sod. bicarb. made a marked improvement, and 5 days later patient came into labour and delivered herself naturally of a macerated fœtus, and after delivery her condition rapidly returned to normal.

In the second case, which had a history of vomiting for some months, labour was induced by rupture of the membranes, and a premature stillborn child was naturally expelled. For some days after delivery patient did not sleep without some soporific, but this gradually cleared up, and she was quite well when discharged. There was never any acetone in the urine.

Chorea.—1 case, ? functional. She was treated in hospital for some weeks, and was allowed to come into labour naturally and deliver herself of a living child. The choreic movements improved rapidly after delivery.

Placenta Prævia.—15 cases: 2 central; 9 marginal; 4 lateral. There were 2 maternal deaths, 1 from shock, and 1 from persistent vomiting for 2 days after delivery. 4 of the children were living.

(*See table on p.* 118.)

Accidental Hæmorrhage.—7 cases: 5 slight. They all had normal labours, no interference being necessary. 1 of the babies was stillborn; the rest lived.

1 case, where the hæmorrhage continued in spite of complete rest in bed and bromide by mouth, was induced with a De Ribes' bag, and had a normal labour. The child was stillborn.

1 case, admitted in labour with a rapid pulse, having lost heavily before admission, had a bipolar podalic version performed and traction made on the legs of the child. She was delivered of a living female, and made an uninterrupted recovery.

Post-partum Hæmorrhage.—9 cases. 2 adherent placenta, which were removed manually. 1 of these was a marginal placenta prævia, and died 2 days after delivery from persistent vomiting.

The other case was an L.O.A., and after the removal of the placenta was given an intra-uterine douche and saline *per rectum*.

Of the other cases, 1 was in a marginal placenta prævia, and the patient died from shock a few hours after delivery.

The other cases were treated by means of hot intra-uterine douches, inj. ergot hyp. and pituitary extract hypodermically.

Contracted Pelvis.—20 cases: 5 treated by Cæsarean section; 6 by induction of premature labour; 2 by forceps delivery; 3 by perforation of the head; 2 breech cases by jaw-shoulder traction; 1 transverse by podalic version; and 1 was delivered normally. All mothers did well and all children likewise, except the case where it was necessary to perforate.

(*See table on p.* 120.)

Case.	Age.	Parity.	Maturity.	Urine.	Convulsions.	Treatment and remarks.	Result. M.	Result. C.
E. W—	22	Prim.	Full	·25 per cent. albumin, which rapidly disappeared after delivery	1 just before the child was born, and 1 directly after the delivery of the placenta	The child was born naturally, and directly after the completion of the 3rd stage patient was given inj. morph. hyp. gr. $\frac{1}{4}$, which was repeated in 4 hours. At the same time saline Oj. was given P.R. General œdema 3 weeks before delivery.	G.	G.
A. T—	29	Mult.	26th week	Solid on boiling	11 fits, all before delivery	Forcible delivery by means of manual dilatation of cervix and perforation of head. Inj. morph. hyp. gr. $\frac{1}{4}$ 4-hourly. Venesection ℥vi. Infusion with saline and sod. bicarb. ℥xxii. Œdema 3 weeks before delivery.	G.	S.
K. M—	26	Prim.	34th week	Albumin ·15 per cent.; acetone present	5 fits, 2 before admission to hospital, 3 more, delivery	On admission patient was found to be in labour, which was hastened by traction on the breech. Morphia gr. $\frac{1}{2}$ on admission; calomel gr. v after delivery.	G.	S.
I. B—	26	,,	34th week	Solid on boiling. Blood +	5 fits before delivery, 1 after	Manual dilatation of cervix, int. podalic version, traction on breech, perforation of after-coming head. Inj. morph. hyp. gr. $\frac{1}{3}$ 4-hourly. Intravenous infusion saline and sod. bicarb. 2¼ pints. Œdema and headache 5 days before fits commenced.	G.	S.
N. Q—	26	,,	35th week	Solid on boiling	19 fits before delivery, 2 after	Patient was delivered by Cæsarean section. She remained in a semi-comatose state for 2 days after delivery, and then gradually improved. Morphia gr. $\frac{1}{2}$ and then gr. $\frac{1}{4}$ 4-hourly. Saline and sod. bicarb. infusion ℥xx, calomel gr. v, after delivery. Œdema and headache 3 days before delivery.	G.	S.
H. F—	36	,,	Full	,,	16 fits before delivery	Patient was delivered by Cæsarean section. Morphia gr. $\frac{1}{4}$ 4-hourly. Saline P.R. Œdema 5 weeks.	G.	G.
B. M—	28	,,	38th week	,,	? Number of fits; comatose and jaundiced on admission	Delivered by Cæsarean section, and progress was very good until the 6th day, when patient had a rigor and died. Saline intravenous 1½ pints. P.R. 2 pints. Morphia gr. $\frac{1}{4}$. Dimness of vision and headache 2 days before onset of fits.	D.	D.

E. B—	20	„	36th week	Albumin ·25 per cent. Esbach	A very large number, 30–40 probably	Delivered by Cæsarean section, but patient never rallied, and died about 8 hours later. Saline intravenously, morphia, etc. Severe epigastric pain a few hours before fits commenced.	D.	S. Twins.
A. J—	35	Mult.	Term	Solid on boiling	Post-partum 13 fits	Hot-air bath. Morphia gr. $\frac{1}{4}$.	G.	G.
W. H—	23	Prim.	„	Albumin ·5 per cent. Esbach	? 1 fit before delivery, 8–10 after	Delivered at home by forceps. Quite normal after delivery for 2 hours, when fits commenced. Morphia gr. $\frac{1}{2}$ and gr. $\frac{1}{4}$ 4-hourly. Saline infusion with sod. bicarb. 1 pint.	G.	G.

Albuminuria.

Case.	Age.	Parity.	Maturity.	Urine. On admission.	Urine. On discharge.	Treatment and remarks.	Result. M.	Result. C.
A. T—	35	Mult.	12th week	·05 per cent. Esbach	Faint cloud on boiling	This patient had been induced 4 months before with severe albuminuria and retinitis. She became pregnant 1 month after leaving hospital, and was admitted for 1 week for observation.	—	—
H. M—	27	Prim.	32nd week	·1 per cent. Esbach	·1 per cent. Esbach	Mild albuminuria treated by rest in bed for 1 week.	—	—
E. M—	24	„	36th week	·25 per cent. Esbach	·2 per cent. Esbach	Patient was in bed for 1 week, and came into labour naturally. It was complicated by a marginal placenta prævia.	F.	S.
H. K—	22	„	Full	+ +	Not stated	Twin pregnancy; both delivered by forceps. Patient came into labour naturally.	G.	G.
S. C—	26	„	36th week	·9 per cent. Esbach	Faint cloud on boiling	Patient was in hospital on a milk diet for 10 days before delivery, during which time her condition improved markedly. Twin pregnancy; normal labour.	G.	G.
C. H—	24	„	Term	Solid on boiling	Do.	Admitted in labour; delivered by forceps.	G.	G.
E. G—	32	„	„	·05 per cent. Esbach	*Nil*	In hospital on Fever ii diet for 5 days before delivery. Twins. 1st, normal labour; 2nd, transverse, podalic version.	G.	G.
L. F—	32	Mult.	24th week	Solid on boiling	·1 per cent. Esbach	Patient aborted naturally.	G.	—
M. B—	34	„	36th week	Over 1 per cent. Esbach	Under 1 per cent. Esbach	Patient was in hospital for 2 weeks before she commenced labour, during which time there was a marked improvement.	G.	G.

Placenta Prævia.

Case.	Age	Parity.	Maturity.	Variety.	Treatment and remarks.	Result. M.	Result. C.
A. H—	29	Mult.	36th week	Central	Slight hæmorrhage the day before admission followed by a severe flooding the morning of admission. De Ribes' bag followed by bipolar podalic version.	G.	S.
B. C—	31	,,	38th week	,,	History of slight hæmorrhage at intervals, commencing 3 weeks before admission. De Ribes' bag followed by a natural delivery, the placenta appearing in front of the vertex.	G.	S.
E. W—	37	,,	34th week	Marginal	History of flooding day before admission. De Ribes' bag followed by normal delivery. Some P.P.H. treated by ergot and hot douches. The mother suddenly collapsed a few hours after delivery and died.	D.	S.
A. F—	32	,,	36th week	,,	Hæmorrhage 5 days before admission repeated day of admission. Vagina plugged and patient sent to hospital, where bipolar podalic version was performed. All this time patient was suffering from severe vomiting. After delivery of the child the placenta was adherent, and had to be removed manually. Saline P.R. and pituitary extract were given, and condition improved, but the vomiting continued, and the patient died 48 hours after delivery.	D.	S.
G. S—	33	,,	36th week	,,	Hæmorrhage with onset of labour, but not severe. On admission loss small. Patient kept in bed. Pains continued, but nothing active was thought necessary. Until when the os was fully dilated the fœtus was found to be lying transversely, so podalic version was done. Patient had marked shock after delivery, and was given saline P.R. and inj. pituitary.	G.	S.

Placenta Prævia—(continued).

Case.	Age.	Parity.	Maturity.	Variety.	Treatment and remarks.	Result. M.	C.
S. B—	36	Mult.	36th week	Marginal	Hæmorrhage the day before admission treated by vaginal plugging. A toy bag was first inserted followed by a De Ribes' bag. When the latter bag came out a podalic version was done and the patient delivered.	G.	D.
D. S—	25	,,	Term	,,	Severe hæmorrhage the day before admission treated by plugging. On admission bipolar version, and patient delivered.	G.	G.
L. T—	26	,,	,,	,,	Normal labour. Some small hæmorrhages during 2 weeks previous to admission, followed by severe hæmorrhage when labour commenced. When seen os fully dilated, so membranes were ruptured and patient delivered herself.	G.	S.
J. B—	24	,,	? 32nd week	,,	Hæmorrhage day of admission. In bed 3 days with slight losses; then induction with De Ribes' bag, followed by podalic version and perforation of after-coming head. Saline P.R.	G.	S.
M G—	26	,,	34th week	,,	Some hæmorrhage when pains commenced. Placenta prævia diagnosed. Vagina plugged, and patient sent to hospital. On removal of plug, head was found on perinæum and natural delivery followed.	G.	S.
B. H—	27	,,	Term	,,	Hæmorrhage day of admission. In bed 3 days in hospital when pains commenced and normal labour followed.	G.	G
M. L—	28	Prim.	33rd week	Lateral	Slight hæmorrhage before admission. In bed 3 days, and then normal delivery of a breech presentation.	G.	D.
L. H—	46	Mult.	30th week	,,	Slight hæmorrhage 2 and 1 week before admission, when transverse presentation was diagnosed. Podalic version and then normal delivery.	G.	S.
E. M—	21	Prim.	37th week	,,	Hæmorrhage for 1 week before admission. Normal labour 8 days after admission.	G.	G.
E. B—	26	Mult.	Term	,,	Slight loss during whole of 1st stage of an otherwise normal labour.	G.	S.

Contracted Pelvis.

Case.	Age	Maturity.	Parity.	Pelvic measurements.			Treatment, etc.	Result. M.	Result. C	Weight of child.	Length of child inches.
				Intersp.	Interc.	Diag. conj.					
E. E—	29	Full	Prim.	9¼	9¼	2½ +	Rachitic dwarf, height 4 ft. 2½ in. *Cæsarean section.*	G.	G.	7 lb. 4 oz.	19½
P—	30	,,	Mult.	—	—	—	*Cæsarean section.* Patient had been in 2nd stage of labour some time, but the head was above the brim on admission.	G.	G.	9 lb. 2 oz.	21
A. H—	34	,,	,,	10¼	11	4¾	4 previous labours, all difficult. Only 1 child survived. *Cæsarean section.*	G.	G.	10 lb. 9 oz.	20
L. M—	23	,,	,,	10	10¾	3¾	1st labour terminated by perforation. *Cæsarean section.*	G.	G.	8 lb.	—
M. H—	27	,,	,,	9½	10	4¼	1st labour, high forceps; 2nd, Cæsarean section. Both children died. *Cæsarean section.*	G.	G.	5 lb. 13 oz.	19
E. J—	28	38th week	,,	10	10½	4¼	1st labour terminated by perforation. *Induction* with De Ribes' bag. Normal labour.	G.	G.	6 lb. 8 oz.	19
M. A—	28	36th week	Prim.	8¼	9¼	4½	*Induction* with bougies. Normal labour.	G.	G.	4 lb. 6 oz.	18
G. G—	29	Full	Mult.	9¾	11	?	3 previous labours difficult. 1 living child. *Induction* with toy bag.	G.	G.	7 lb. 9 oz.	19½
C. W—	20	,,	Prim.	9	10	4½	*Induction* with bougies. Normal labour.	G.	G.	6 lb. 6 oz.	19
S. A—	37	38th week	Mult.	10½	4¼	4¼	4 previous labours difficult. *Induction* with bougie and De Ribes' bag. Bipolar podalic version.	G.	G.	7 lb. 3 oz.	19½
E. B—	35	Full	,,	9¾	10¼	3¾ +	2 premature labours previously and 1 difficult full-term one. *Induction* with bougies. Normal labour.	G.	G.	7 lb. 7 oz.	19½
E. R—	34	,,	,,	9¼	10¾	4 +	Transverse presentation. Bipolar podalic version.	G.	G.	6 lb. 6 oz.	21
E. S—	37	,,	,,	—	—	4 +	Breech. Head delivered by jaw-shoulder traction.	G.	G.	7 lb. 1 oz.	20
M. P—	26	,,	Prim.	—	—	4¼	Impacted breech with extended arms and legs. Legs and arms brought down. Head delivered by jaw-shoulder traction.	G.	G.	9 lb. 8 oz.	21
E. H—	23	,,	Mult.	9½	10½	4 +	Breech. Normal labour.	G.	G.	6 lb. 13 oz.	21
J. J—	34	,,	,,	10½	11½	4¾	L.O.A. Delivered by high forceps.	G.	G.	8 lb.	20
M. M—	28	,,	,,	9¾	10¼	4¼	R.O.A. High forceps.	G.	G.	7 lb. 10 oz.	19½
F. D—	36	,,	,,	—	—	—	Post-mature child. Internal podalic version; perforation of after-coming head.	G.	S.	11 lb. 12 oz.	? 26
D. B—	25	,,	Prim.	—	—	—	L.O.A. with prolapsed arm. Bipolar podalic version with perforation of after-coming head.	G.	S.	—	20
A. F—	36	,,	Mult.	8¼	9¼	4¼	Brow presentation with accidental hæmorrhage. Perforation.	G.	S.	7 lb.	—

Obstructed Labour.

(*a*) *Delayed second stage.*—10 cases treated by extraction with forceps, L.O.A. 4; R.O.A. 2; R.O.P. 2 (1 unreduced). L.O.P. 2 (1 unreduced). 1 case also had P.P.H., and 1 a complete ruptured perinæum which was sutured.

(*b*) *Obstructed breech.*—2 cases with extended legs, in 1 the legs were brought down and the head delivered by jaw-shoulder traction. The other case also had a prolapsed cord, the legs and arms were brought down and the head delivered by perforation and cephalotripsy. There was a complete ruptured perinæum which was sutured.

(*c*) *Transverse*, 4 cases. 1 the second of twins. All treated by podalic version; one of the children was stillborn.

(*d*) *Prolapsed cord*, 1 case. Treated by podalic version and perforation of after coming head.

Pregnancy, Various.

(*a*) *Cardiac disease*, 10 cases. Mitral disease, 9; 6 of these had normal labours; 1 had labour terminated by forceps; 1 had induction a few days before term followed by normal delivery, and one uncompensated case had induction of abortion.

Aortic disease, 1 case. Normal first and second stages, the placenta was adherent and had to be removed manually.

(*b*) *Other diseases.*—1 case of exophthalmic goitre had a normal labour; 1 case of diabetic coma had accouchement forcé, but never recovered consciousness, and died within a few hours of delivery; 1 case of œsophageal stricture from attempted suicide with acid had a normal labour; 1 case of tuberculosis of spine and peritoneum had the uterus evacuated at the third month; 2 cases of expression of cord as the head was being delivered had the cord replaced and both gave birth to living children; 1 case of hydrocephalus, the mother had a normal delivery, the fœtus was stillborn.

(*c*) *Not delivered in hospital.*—Retroverted gravid uterus, 1 case; the uterus was replaced and kept in position with a Hodge pessary; 1 case of respiratory embarrassment treated by rest in bed; 1 case of abdominal pain with pregnancy treated by rest in bed; 1 case of *petit mal*; 1 case of varicose veins of legs, both latter treated by rest in bed.

Ruptured Perinæum.

All cases of actual tears of the perinæum are included and all were sutured. Primiparæ: incomplete tears, 26; complete tears, 1. Multiparæ: incomplete tears, 5; complete tears, 1.

Retained Placenta and Membranes.

2 cases of adherent placenta removed manually (see under *Post-partum Hæmorrhage*); 11 cases of complete or partial retention of the chorion were left, and in all cases the membrane was passed with the lochia; 2 had slight sapræmia.

Maternal Morbidity.

The following figures are based on the ground that any case which shows a temperature of over 100° F. is morbid.

Cause.	Number of cases.
Septicæmia	1
Sapræmia	24
Gastro-intestinal	15
Mammary	24
Reaction	29
Emotional	4
Urinary	1
Pulmonary	3
Peritonitis	2
Toxic	11
Various	11
	125

Of these 125, 8 cases come under two headings, so that the total number of women showing a morbid temperature was 117, giving a percentage of 23·21.

Duration of the Temperature.

Days	1	2	3	4	5	6 or over.
No. of cases	65	28	12	2	3	7

Range of Temperature.

100–101° F.	101–102° F.	102–103° F.	103° F. and over.
69	28	9	11

TABLE II.—*Surgical and Gynæcological Operations.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
1. Splenic anæmia—			
Splenectomy	1	...	
4. Diphtheria—			
Tracheotomy	5	4	
5. Enteric fever—			
Laparotomy	...	1	Laparotomy for suspected perforation.
6. Erysipelas—			
Incision of abscess	7	...	
8. Gonorrhœa—			
Circumcision	1	...	
Incision of cellulitis	4	...	
12. Lymphadenoma—			
Excision of glands	3	...	
16. Pyæmia—			
Incision of abscess	3	...	
17. Purpura—			
Laparotomy	1	...	Nothing abnormal found.
19. Rheumatoid arthritis—			
Aspiration of knee	6	...	
Arthrotomy of knee	1	1	Died of diphtheria.
Excision of elbow	1	...	
22. Septicæmia—			
Multiple incisions	...	1	Primary focus a carbuncle.
23. Syphilis—			
Circumcision	5	...	
24. Tetanus—			
Amputation of finger	...	1	
Amputation of toe	...	1	
26. Acute abscess—			
Incision	62	5	
27. Chronic abscess—			
Incision and curetting	26	...	
Removal of toe and arm	1	...	
28. Cellulitis—			
Incision	58	2	
Amputation of finger	6	...	
Amputation of hand	1	...	
Amputation of leg	1	2	
Tracheotomy	...	1	
Sequestrotomy	1	...	
29. Sinus—			
Incision and curetting	9	...	
30. Carbuncle—			
Incision	6	2	
Excision	4	1	
31. Various general diseases—			
Incision of abscess	1	...	Actinomycotic abscess of thigh.

TABLE 11—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died.	
32. Diseases of the nose—			
Resection of septum	120	...	
Turbinectomy	23	...	
Ethmoidal curetting	8	...	
Curetting for lupus	7	...	
Removal of tonsils or adenoids	21	...	
Lateral rhinotomy	1	...	
Incision of nasal abscess	1	...	
Amputation of toes	1	...	
33. Diseases of antrum and sinuses—			
Incision of frontal mucocele	1	...	
External drainage of frontal sinus	5	...	
Frontal exploration	1	...	
Internal dachryocystotomy	1	...	West's operation.
Ethmoidal curetting	35	...	
Exenteration of ethmoid	3	...	For sarcoma in 1 case.
Maxillary anthrotomy	17	...	
Turbinectomy	5	...	
Resection of septum	1	...	
Alcohol injection	2	...	
34. Diseases of the larynx—			
Excision of papilloma of cord	1	...	
Excision of fibroma of cord	1	...	
Cautery	3	...	
Alcohol injection	1	...	
Operations for stenosis	4	...	All on 1 case.
Carcinoma—			
Tracheotomy and lateral pharyngotomy	1	...	
Tracheotomy and excision	2	...	
Partial excision	1	...	
Excision of glands	3	...	
35. Bronchitis—			
Removal of nasal polypi	1	...	For asthma.
36. Broncho-pneumonia—			
Rib resection	6	...	For drainage of empyema.
37. Pneumonia—			
Rib resection	6	1	For drainage of empyema.
38. Bronchiectasis—			
Incision of abscess	1	...	A lumbar abscess.
39. Phthisis—			
Amputation of forearm	1	...	For tuberculous wrist.
41. Empyema—			
Rib resection and drainage	23	3	
Thoracoplasty	1	1	For old empyemata.
Incision of abscess	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died.	
42. Pyopneumothorax—			
Rib resection and drainage	3	1	
44. Respiratory, various—			
Removal of hydatid of lung	1	...	
Drainage of lung abscess	...	1	
Gastrostomy	...	1	For tracheo-œsophageal fistula.
49. Gangrene—			
Amputation through thigh	6	2	
Incision of abscess	1	...	
50. Mitral disease—			
Removal of tonsils and adenoids	1	...	
53. Pericarditis—			
Rib resection and pericardial drainage	...	1	
Decapsulation of kidneys	...	1	For chronic nephritis and uræmia.
54. Varicocele—			
Excision	82	...	
Excision of varicose veins	3	...	
Radical cure of inguinal hernia	1	...	
Radical cure of hydrocele	1	...	
55. Varicose veins—			
Trendelenberg's operation alone	15	...	6 bilateral.
Trendelenberg's operation with local excision	127	1	35 ,,
Local excision	2	...	2 ,,
Excision of varicocele	2	...	
56. Thrombosis—			
Incision of abscess	1	...	
59. Cysts (skin and subcutaneous)—			
Excision	6	...	
60. Tumours (skin and subcutaneous)—			
Excision of malignant tumour	5	...	
,, tumour and glands	1	...	
,, glands	3	...	
,, rodent ulcer	2	...	
,, non-malignant tumour	41	...	
Amputation of forearm	1	...	
Skin grafting	6	...	
61. Ulcers—			
Excision	1	...	
Curetting	2	...	
62. Skin diseases, various—			
Excision	7	...	
Curetting	4	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discha.	Died.	Remarks.
62. Skin diseases, various—*continued.*			
Operations for in-growing toe-nails	6	...	
63. Diseases of mouth and pharynx—			
Excision of simple tumours	12	...	
Excision of malignant growth and glands	5	...	
Excision of growth only	1	...	
„ glands only	1	...	
Tracheotomy and excision of growth and glands	1	1	
Laryngotomy and excision of growth and glands	...	1	
Tracheotomy and exploration	...	1	
Excision of mandible	1	...	
Excision of epithelioma of palate	1	...	
Curetting ulcer	1	...	
Incision of abscess	1	...	
64. Tonsils and adenoids—			
Removal of tonsils and adenoids	60	...	
Excision of sarcoma of tonsils and glands	1	...	
Incision of peri-tonsillar abscess	1	...	
Excision of cervical glands	2	...	Tuberculous.
65. Tongue and lips—			
Tongue—			
Excision of carcinoma and glands	8	...	
Laryngotomy and excision	...	1	
Excision of glands only	1	1	
Excision of lymphangioma	1	...	Partial excision.
Excision of ulcer	1	...	
Lips—			
Excision of carcinoma and glands	5	...	
Excision of recurrent growth	3	...	
Excision of simple tumours	2	...	Fibroma, 1; papilloma, 1.
Excision of simple ulcers	2	...	
66. Œsophagus—			
Gastrostomy	6	4	
Appendicectomy	1	...	
67. Stomach—			
(*a*) Ulcer—			
Pylorectomy and gastro-enterostomy	...	1	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died.	
67. Stomach—*continued.*			
(*a*) Ulcer—*continued.*			
Posterior gastro-jejunostomy	6	...	
Roux's gastro-jejunostomy	1	...	
Gastrostomy and pyloric intubation	1	...	
Appendicectomy	1	...	
(*b*) Perforated ulcer—			
Laparotomy and suture of ulcer	8	4	
Do. with gastro-jejunostomy	2	...	
Drainage of subphrenic abscess	3	...	
Drainage of residual abscess	1	...	
(*c*) Carcinoma—			
Partial gastrectomy	...	2	
Posterior gastro-jejunostomy	8	1	
Gastrostomy	...	1	
Ileostomy	...	2	
Laparotomy	8	1	
Excision of cervical glands	2	...	
(*d*) Dilatation—			
Laparotomy	2	...	Old gastro-jejunostomy undone in 1.
(*e*) Various—			
Posterior gastro-jejunostomy	17	...	Hour-glass stomach, 3; pyloric obstruction, 13; gastric pain, 1.
Anterior gastro-jejunostomy	3	...	Hour-glass stomach, 1; pyloric obstruction, 1; old gastric ulcer, 1.
Gastro-gastrostomy	1	...	For hour-glass stomach.
Do. and gastro-jejunostomy	1	..	
Digital dilatation of pylorus	1	...	For pyloric obstruction.
Laparotomy	3	...	
Appendicectomy	2	...	
68. Duodenum—			
Posterior gastro-jejunostomy	9	2	
Anterior gastro-jejunostomy	1	...	
Laparotomy and closure of perforation	8	7	
Cholecyst-enterostomy	1	...	
Appendicectomy	1	...	
Radical cure of hernia	1	...	Inguinal; Bassini.

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discbd	Result. Died.	Remarks.
69. Hæmatemesis—			
Posterior gastro-jejunostomy	1	...	
70. Intestinal, various—			
Simple—			
Operations for fæcal fistula	5	2	
Various anastomoses	2	...	
Diverticulectomy	1	...	
Appendicectomy	3	...	
Malignant—			
Resection and anastomosis	2	2	
Resection and colostomy	...	1	
Anastomosis only	2	1	
Colostomy	3	...	
Laparotomy	3	...	
Laparotomy and drainage of abscess	2	1	
71. Appendicitis, quiescent—			
Appendicectomy	186	2	
Division of adhesions	2	...	
Cholecystectomy	1	...	
Ovariotomy	2	...	
Radical cure of hernia	5	...	Ventral, 3; inguinal, 2.
Cæco-sigmoidostomy	1	...	
Incision of abscess	1	...	
72. Appendix abscess			
Incision or drainage	27	3	
Do. by extra-peritoneal route	2	...	
Do. by trans-peritoneal route	9	1	
Cœliostomy	3	...	
Appendicectomy and drainage	4	...	
Subsequent appendicectomy	11	...	
Ileo-transverse colostomy	1	...	
Drainage of empyema	1	...	
Drainage of subphrenic abscess	...	1	
73. Acute appendicitis—			
Appendicectomy in acute stage	181	15	
Do. in quiescent period	24	...	
Laparotomy and drainage	2	2	
Cœliostomy	1	1	
Drainage of residual abscess	10	1	
Drainage of empyema	2	...	
Drainage of subphrenic abscess	1	...	
Tenotomy	1	...	
Laparotomy for subsequent obstruction	...	1	
Ileostomy for subsequent obstruction	...	1	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discharged.	Result. Died.	Remarks.
74. Colitis—			
Cæcostomy	2	..	
Resection of cæcum and ascending colon	1	...	
75. Intestinal obstruction—			
(*a*) Simple—			
Resection of ileum and anastomosis	1	...	
Resection of colon and colostomy	1	1	
Ileo-colostomy	1	...	
Various anastomoses	3	1	
Colostomy	...	3	
Laparotomy	5	3	
Hysterectomy	1	...	Appendix and appendages also removed.
(*b*) Malignant—			
Resection and anastomosis	...	1	
Resection and colostomy	2	1	
Lateral anastomosis	1	1	
Colostomy	21	5	
Secondary resection and anastomosis	1	2	
Secondary anastomosis	1	...	
(*c*) Intussusception—			
Laparotomy and reduction	17	3	Also appendicectomy in 2.
Resection and anastomosis	1	1	
76. Rectum and anus—			
(*a*) Carcinoma—			
Colostomy	22	5	
Excision of rectum	2	3	Kraske, 1; perineal, 2; abdomino-perineal, 2
(*b*) Simple stricture—			
Colostomy	2	...	
(*c*) Prolapse—			
Amputation	2	...	
Colopexy	1	...	
(*d*) Polypi—			
Excision	3	...	
Ligature of hæmorrhoids	1	...	
(*e*) Epithelioma of anus—			
Colostomy	1	...	
(*f*) Rectal hæmorrhage—			
Laparotomy	...	1	
(*g*) Incontinence—			
Proctorrhaphy	1	...	
77. Hæmorrhoids—			
Partial Whitehead	11	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discld.	Result. Died.	Remarks.
77. Hæmorrhoids—*continued.*			
Ligature	104	...	
Excision of varicose veins	1	...	
Excision of varicocele	1	...	
Incision of rectal abscess	1	...	
Excision of prolapse	1	...	
Excision of fissure	1	...	
78. Fistula and *fissure-in-ano*—			
(*a*) Fissure—			
Excision	5	...	
Incision	5	...	
Curetting	1	...	
Cautery	5	...	
Stretching of sphincter	6	...	
Excision of hæmorrhoids	2	...	
(*b*) Fistula—			
Incision and curetting	32	...	
Excision of hæmorrhoids	3	...	
Excision of polyp	1	...	
Excision of lipoma	1	...	
Incision of abscess	2	...	
79. Abdominal pain—			
Appendicectomy	5	1	
Laparotomy	4	...	
Cholecystectomy and appendicectomy	1	...	
Gastro-duodenostomy and appendicectomy	1	...	
Tonsillectomy	1	...	
80. Constipation—			
Ileo-colostomy	1	...	
Laparotomy	1	...	
Appendicectomy	1	...	
Ligature of hæmorrhoids	1	...	
Removal of rectal polyp	1	...	
82. Dyspepsia—			
Laparotomy	1	...	
Appendicectomy	1	...	
85. Abdominal, various—			
Laparotomy	7	1	
Appendicectomy	1	...	
Ileo-sigmoidostomy	1	...	
Ovariotomy	1	...	
Incision of cellulitis	1	...	
86. Foreign bodies in the intestinal tract—			
Laparotomy	2	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discha.	Result. Died.	Remarks.
87. Salivary glands—			
(*a*) Parotid tumour—			
Excision of tumour	7	...	
Excision of parotid	...	1	
Radical cure of hernia	1	...	Inguinal.
(*b*) Various—			
Excision of submaxillary gland	5	...	
Excision of sublingual gland	1	...	
Removal of ureteric calculus	1	...	
88. Cirrhosis of liver—			
Talma-Morrison operation	1	...	
89. Cholelithiasis—			
Cholecystostomy	20	3	
Cholecystectomy	9	1	
Choledochotomy	6	2	
Cholecyst-duodenostomy	1	...	
Laparotomy	1	...	
90. Cholecystitis—			
Cholecystostomy	10	1	
Cholecystectomy	2	...	
Appendicectomy	2	1	
91. Jaundice—			
Splenectomy	2	...	For acholuric jaundice.
92. Pancreas—			
Acute pancreatitis—			
Laparotomy	1	1	
Ileostomy	...	1	
Chronic pancreatitis—			
Cholecystostomy	1	...	
Gastro-jejunostomy	...	1	
Choledochostomy	1	...	
Carcinoma of pancreas—			
Laparotomy	1	...	
Gastro-jejunostomy	1	...	
Cholecystostomy	...	1	
Pancreatic cyst—			
Laparotomy and drainage	1	1	
93. Digestive, various—			
Laparotomy	1	...	
Cholecystectomy	1	...	
Drainage of liver abscess	2	1	
95. Tuberculous peritonitis—			
Laparotomy	1	...	
Appendicectomy	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION	Result. Discha.	Result. Died.	Remarks.
96. Peritonitis, various—			
Laparotomy	8	2	
Appendicectomy	3	...	
Ovariotomy	1	...	
Radical cure of ventral hernia	1	...	
Exploration for empyema	1	...	
97. Hernia—			
Inguinal—			
Radical cure by—			
Foster's method	500	5	4 of the fatal cases were strangulated.
Bassini's method	97	...	
Bloodgood's method	8	...	Tube and ovary amputated in 2.
Filigree implantation	14	...	
Simple suture	177	...	
Laparotomy and reduction	...	1	All in strangulated herniæ.
Laparotomy and resection	...	1	
Herniotomy and resection	...	2	
Laparotomy	1	...	
Appendicectomy	6	...	
Orchidopexy	3	...	
Orchidectomy	12	...	
Negative exploration of canal	3	...	
Excision of varicocele	7	...	
Excision of varicose veins	4	...	
Excision of hydrocele	10	...	
Ligature of hæmorrhoids	2	..	
Various minor operations	14	...	
Femoral—			
Radical cure by—			
Suture	56	2	
Battle's operation	13	...	
Ligature of sac only	3	...	
Negative exploration of canal	1	...	
Laparotomy	...	1	For suture of perforation.
Laparotomy and reduction	2	...	
Laparotomy and resection	...	1	
Herniotomy and resection	1	...	
Appendicectomy	2	...	
Radical cure of inguinal hernia	2	...	
Removal of cysts of epididymis	1	...	
Umbilical and ventral—			
Radical cure	45	1	
Filigree implantation	2	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died.	
97. Hernia—*continued.*			
Umbilical and ventral—*continued.*			
Herniotomy and lateral anastomosis	1	...	
Herniotomy and resection	...	3	
Appendicectomy	2	...	
Radical cure of inguinal hernia	1	...	
Various:—			
Excision of epigastric lipoma	1	...	
98. Adenitis—			
Simple—			
Excision of glands	7	...	
Incision of glands	10	...	
Removal of tonsils and adenoids	1	...	
Tuberculous—			
Excision of glands	80	...	
Incision and curetting	38	..	
Laparotomy	1	...	
Removal of tonsils and adenoids	8	...	
99. Glands, malignant—			
Excision	7	...	
102. Graves's disease—			
Ligature of superior thyroid arteries	2	...	
103. Thyroid, various—			
Hemithyroidectomy	13	1	
Excision of adenoma	13	...	
Incision of thyroid capsule	1	...	
104. Various—			
Excision of lipoma	1	...	
105. Diseases of the breast—			
Simple—			
Amputation	29	...	
Excision of tumours, etc.	20	...	
Incision of abscess	9	...	
Malignant—			
Complete amputation	62	3	
Excision	4	1	
Amputation	1	...	
Excision of recurrence	4	...	
106. Testicle undescended—			
Orchidopexy	14	...	
Orchidectomy	6	..	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died	
107. Testicle and epididymis, various—			
Orchidectomy	17	...	
Excision of epididymis	1	...	
Excision of cysts of epididymis	5	...	
Incision of testis	3	...	
108. Tunica and processus vaginalis—			
Excision of tunica	39	...	
Eversion	22	...	
Radical cure of inguinal hernia	2	...	
Excision of varicocele	1	...	
Orchidectomy	1	...	
Circumcision	3	...	
109. For diseases of the ovary—			
Removal of 1 ovary	40	...	
Removal of both ovaries	11	3	
Exploratory laparotomy	1	...	
Broad ligament cysts	4	...	
110. For diseases of the Fallopian tube—			
Removal of 1 tube	24	...	
Removal of both tubes	40	2	
111. For ectopic gestation—			
Removal of 1 tube	15	...	
Removal of both tubes	2	...	
112. For menstrual disorders—			
Dilatation and curetting	56	...	
Complete abdominal hysterectomy	2	...	
Vaginal hysterectomy	1	...	
113. For incomplete abortion—			
Uterus evacuated	19	...	
114. For diseases of the body of the uterus—			
Dilatation and curetting	12	...	
Supra-vaginal hysterectomy	29	2	
Complete hysterectomy	30	1	
Vaginal hysterectomy	2	...	
Myomectomy	2	...	
Removal of polypi	19	...	
115. For diseases of the cervix—			
Wertheim's operation	6	3	
Abdominal hysterectomy	5	...	
Vaginal hysterectomy	1	...	
Amputation of cervix	4	...	
Emmet's operation	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
116. For pelvic inflammation—			
Incision and drainage	2	...	
Laparotomy and drainage	5	...	
Supra-vaginal hysterectomy	1	...	
117. For diseases of vagina and vulva—			
Excision of new growths	14	1	
Excision of Bartholin's gland	1	...	
Repair of fistulæ	2	...	
Incision of vaginal septa	2	..	
Dilatation and curetting	3	...	
118. For ruptured perinæum	9	...	
119. For prolapse and displacements—			
Posterior colpo-perineorrhaphy	50	...	
Anterior colporrhaphy	18	...	
Ventral fixation	22	...	
Amputation of cervix	18	...	
Le Fort's operation	1	...	
Vaginal hysterectomy	1	...	
120. For genital, various—			
Dilatation and curetting	5	...	
121. Movable kidney—			
Nephropexy	13	.	
Ureterotomy	1	...	
Appendicectomy	2	...	
122. Renal calculus and colic—			
Nephrolithotomy	10	1	
Pyelolithotomy	3	...	
Exploratory nephrotomy	2	...	
Ureterotomy	2	...	
Nephrectomy	2	...	
Appendicectomy	2	...	
123. Hydronephrosis—			
Nephrotomy	2	...	
Nephrostomy	1	...	
Nephrectomy	5	..	
Ligature of renal artery	1	...	
Supra-pubic cystotomy	...	1	
124. Pyonephrosis—			
Nephrotomy	3	2	
Nephrectomy	1	1	
Appendicectomy	1	...	
125. Kidney—Ureter, various—			
Nephrectomy	7	1	Hypernephroma, 1; carcinoma, 1; tubercle, 5 (1 death); sinus, 1.
Nephrotomy	2	...	Carcinoma, 1; tubercle, 1.
Pyelotomy	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discha.	Result. Died.	Remarks.
125. Kidney—Ureter, various—*continued.*			
Ureterotomy	3	...	
Exploration of kidney	2	...	
Laparotomy	2	...	
127. Chronic nephritis—			
Nephrotomy	2	...	
Nephrectomy	1	...	
128. Vesical calculus—			
Supra-pubic cystostomy	8	...	
Suture of fistula	1	...	
Incision	...	1	
129. Vesical, various—			
(*a*) Carcinoma—			
Excision	1	1	
Supra-pubic cystostomy	2	2	
Excision of inguinal glands	1	...	
(*b*) Papilloma—			
Excision	2	...	
Supra-pubic cystostomy	1	...	
Laparotomy	...	1	
(*c*) Cystitis—			
Nephrotomy	1	...	
(*d*) Various—			
Nephrotomy	1	...	
Supra-pubic cystostomy	2	...	
Laparotomy	1	...	
130. Prostate—			
(*a*) Simple enlargement—			
Prostatectomy	9	4	
Supra-pubic cystostomy	2	3	
Cystostomy: subsequent prostatectomy	3	...	
(*b*) Carcinoma—			
Prostatectomy	1	3	
Supra-pubic cystostomy	2	1	
Cystostomy: subsequent prostatectomy	1	...	
(*c*) Prostatic bar—			
Supra-pubic cystostomy	...	1	Removal of bar.
(*d*) Prostatic calculi—			
Supra-pubic cystostomy	2	...	Removal of calculi.
131. Urethra and external genitalia—			
Circumcision	22	...	
132. Urethral stricture—			
Internal urethrotomy	6	...	
External urethrotomy	3	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Discha.	Died.	
132. Urethral stricture—*continued.*			
Supra-pubic cystostomy	3	3	
Cock's puncture	1	...	
Perineal exploration	...	1	
Incision of abscess	2	...	
134. Muscles—			
Amputation of thigh	1	...	
Incision	2	...	
135. Bursæ and tendons—			
Excision of bursæ	24	...	
Incision of bursæ	13	...	
Excision of ganglion	2	...	
Excision of compound palmar ganglion	1	...	
Excision of lipoma	1	...	
Astragalectomy	1	...	
136. Periostitis—			
Amputation of leg	1	...	
Sequestrotomy	1	...	
Incision	10	1	
137. Osteomyelitis—			
Incision	24	3	
Sequestrotomy	3	...	
Amputation of arm	1	...	
Ampuation of forearm	1	...	
138. Osteitis—			
Curetting	5	...	
139. Caries—			
(*a*) Spinal—			
Albee's operation	2	...	
Costo-transversectomy	1	...	
Appendicectomy	1	...	
Incision of abscess	11	1	
(*b*) Various—			
Incision and curetting	18	...	
Rib resection	1	...	
Sequestrotomy	1	...	
140. Necrosis—			
Sequestrotomy	16	...	
Incision and curetting	6	...	
Amputation of leg	1	...	
Amputation of toe	2	...	
Plating of skull	1	...	Plate removed later.
141. Tumours—			
Excision of simple tumours	11	...	
Exploratory incision	6	...	
Excision of lower end of radius	1	...	For myeloid sarcoma.

TABLE II—*continued.*

DISEASE AND OPERATION	Result.		Remarks.
	Discld.	Died.	
141. Tumours—*continued.*			
Amputation of thigh	2	...	
Amputation of leg	1	...	
142. Bones, various—			
Incision and curetting	8	...	
Excision of cyst	1	...	
Plating of skull	1	...	
143. Amputation stumps—			
Shortening of stumps	3	...	Thigh, 2; arm, 1.
Incision of abscess	1	...	
144. Shoulder—			
Excision of head of humerus	1	...	
Incision of abscess	2	...	
145. Elbow—			
Amputation of arm	1	...	
Excision	1	...	
Partial excision	1	...	
Arthrotomy	1	...	
Incision and curetting	7	...	
Arthroplasty	1	...	
146. Wrist—			
Arthrotomy	2	...	
Sequestrotomy	1	...	
Amputation of forearm	1	...	
Incision	4	...	
148. Hip—			
Arthrotomy	...	1	
Arthroplasty	2	...	
Fourneaux-Jordan amputation	1	...	
Incision	13	1	
Curetting	2	...	
Circumcision	1	...	
149. Knee—			
Excision	1	...	
Arthrotomy	6	1	
Excision of cartilages	26	...	
Excision of synovial fringe	3	...	
Removal of loose bodies	6	...	
Amputation of thigh	3	...	
Excision of cyst	1	...	
Aspiration of joint	1	...	
Incision of abscess	9	...	
Excision of varicocele	1	...	
150. Ankle and tarsus—			
Amputation of thigh	...	2	
Amputation of leg	3	...	
Amputation of foot	1	...	
Incision and curetting	3	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discha.	Result. Died.	Remarks.
151. Joints, various—			
Arthroplasty	3	...	Temporo-maxillary (one bilateral).
Excision of condyle of mandible	1	...	
Excision of inner end of clavicle	1	...	
Arthrotomy	1	...	Sterno-clavicular joint.
Mastoid antrotomy	1	...	
Sequestrotomy	1	...	
Amputation of finger	1	...	
Incision	2	...	
152. Talipes—			
Astragalectomy	2	...	
Partial astragalectomy	1	...	
Tarsectomy	1	...	
Tenotomy	10	...	
Transplantation of tendon	1	...	
153. Torticollis—			
Division of sterno-mastoid and deep fascia	6	...	
154. Genu valgum—			
Osteotomy of femur	5	...	
155. Cicatricial contracture—			
Various minor operations	8	...	
156. Hammer-toe—			
Amputation	5	...	
Excision of head of phalanx	18	...	
157. Pes planus, hallux valgus, etc.—			
Astragalectomy	2	...	Pes planus.
Tenotomy	2	...	Pes cavus.
Tendon lengthening	1	...	Pes cavus.
Arthrectomy	12	...	Hallux valgus.
Excision of head of phalanx	1	...	Hammer-toe.
158. Deformities, various—			
Arthrodesis of knee	2	...	
Osteotomy of femur	2	...	
Osteotomy of tibia	1	...	
Von Mickulicz's operation	1	...	For coxa vara.
Nerve anastomosis	1	...	
Tenotomy	6	...	
Tendon lengthening	1	...	
Excision of head of phalanx	1	...	For deformity of finger.
159. Hare lip and cleft palate—			
Suture of lip	11	...	
Suture of cleft palate—			
By median suture	13	2	
By flap operations	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Discha.	Result. Died.	Remarks.
160. Malformations of the head and neck—			
Excision of meningocele.	...	1	
Excision of cervical ribs.	7	...	
Decompression	1	...	For microcephaly.
Tracheotomy and excision of aberrant thyroid.	1	...	
Excision of branchial fistula	2	...	
Excision of thyroglossal fistula	1	...	
Sequestrotomy	1	...	For necrosis of fibula.
Resection of deflected septum	1	...	
161. Malformations of the trunk—		...	
Incision of imperforate anus	2	...	
Excision of spina bifida	2	1	
Plastic operations for hypospadias	2	...	
Tenotomy of adductor thigh muscles	1	...	For congenital hip.
162. Chronic otitis media—			
Complete mastoid operation with skin grafting	48	...	
Complete mastoid operation with subsequent grafting	1	...	
Complete mastoid operation without grafting	4	...	
Antrotomy	7	...	
Removal of nasal polypi	1	...	
163. Acute mastoiditis—			
Antrotomy	69	4	
Complete mastoid operation	4	...	
169. Cerebral, various—			
Decompression	1	...	For delusional insanity.
172. Epilepsy—			
Decompression	1	...	For traumatic epilepsy.
173. Functional—			
Ureterotomy	1	...	
174. General paralysis—			
Intra-ventricular injection of salvarsanised serum	1	...	
177. Intra-cranial tumour—			
Decompression	7	4	
178. Tuberculous meningitis—	...	1	
Decompression	...	1	
Arthrotomy of wrist			
179. Meningitis—			
Exploration of mastoid	...	1	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result.		Remarks.
	Dischd.	Died.	
181. Neuralgia—			
Removal of Gasserian ganglion	2	...	
Division of inferior dental nerve	1	...	
185. Spinal, various—			
Laminectomy and aspiration of cysts	1	...	For syringomyelia.
186. Injuries of the head—			
Decompression	5	1	
Mandible wired	3	...	
Suture of wounds	9	...	
Incision of suppurating wounds	7	...	
Excision of eye	1	...	
187. Injuries of the neck—			
Suture of cut throat	3	...	
Tracheotomy and suture	...	1	
188. Injuries of the upper extremity—			
Open reduction of fractures	16	...	
Fixation of fractures by—			
Wires	7	...	
Screws	3	...	
Plates	12	...	
Pegs	...	1	
Bone grafts	1	...	
Silk	1	...	
Kangaroo tendon	1	...	
Catgut	1	...	
Excision of head of humerus	2	...	
Excision of capitellum	2	...	
Excision of internal epicondyle	1	...	
Excision of semilunar	1	...	
Excision of scaphoid	2	...	
Sequestrotomy	1	...	
Amputation of arm	1	1	
Amputation of hand	1	...	
Amputation of fingers	8	...	
Arthrotomy of shoulder	1	...	
Nerve exploration	1	...	
Nerve suture	3	...	
Nerve anastomosis	1	...	
Suture of tendons	6	...	
Suture of wounds	4	...	
Exploration of wounds	25	...	
Excision of varicose veins	1	...	
Radical cure of inguinal hernia	1	...	

TABLE II—*continued.*

DISEASE AND OPERATION.	Result. Dischd.	Result. Died.	Remarks.
90. Laparotomy	2	1	Anastomosis of cut transverse colon and suture of cut throat, 1.
Amputation of finger	1	...	
91. Injuries of the genito-urinary system—			
External urethrotomy	1	...	
93. Injuries of the lower extremity—			
Fixation of fractures by—			
Plates	13	...	
Wires	23	...	
Catgut	1	...	
Removal of plates	4	...	
Suture of wounds	9	...	
Exploration of wounds	28	1	
Suture of tendons	5	...	
Sequestrotomy	1	...	
Plastic operation	1	...	
Ligature of hæmorrhoids	1	...	
Excision of varicose veins	1	...	
94. Injuries of the back—			
Exploration of wounds	4	...	
95. Injuries of the joints—			
Excision of head of humerus	1	...	
Excision of semilunar	1	...	
Arthrotomy of—			
Elbow	2	...	
Knee	3	...	
Inter-phalangeal joint	3	...	
96. Injuries of the nerves—			
Exploration	4	...	
Suture	1	...	
97. Malunited and ununited fractures, etc.—			
Amputation of foot	1	...	
Amputation of thigh	1	...	
Osteotomy of humerus	1	...	
Osteotomy of tibia and fibula	1	...	
Plating of skull	1	...	
Plating of olecranon	1	...	
Excision of bone fragments	2	...	
Bone grafting	2	...	
Removal of plates and wires	6	...	
Tenotomy	1	...	

ACUTE INTESTINAL OBSTRUCTION

A STATISTICAL REVIEW.

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This paper has been compiled in order to determine the immediate results of operation in cases of acute intestinal obstruction ; to ascertain what operative methods have been employed and with what success. And for this purpose, all the cases treated during the years 1908–1913 have been collected, tabulated, and analysed.

Here and there cases have been rejected, either because general peritonitis had already followed perforation of the intestine above the obstructed point, or because the notes of a case were inadequate, or for some other reason ; but these exceptions are exceedingly rare, and the 615 cases analysed below constitute practically the whole of the cases submitted to operation during the period under review. The case histories have also been carefully examined in order to avoid the inclusion of those cases, the urgency of which might conceivably be called in question.

Cases of acute intestinal obstruction fall naturally into four groups, a classification which has accordingly been adopted. Thus :

Group A.—Strangulated external hernia.

Group B.—Non-malignant obstruction (excluding intussusception).

Group C.—Malignant obstruction.

Group D.—Intussusception.

For the purpose of tabulation, each case has received a number, but in order to facilitate the identification of individual cases, a reference index has been compiled and inserted at the end of the paper.

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GENERAL

Group A.—

VARIETY.	Age	0—5				5—10				10—20				20—30			
	Total.	Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Inguinal	139	16	2	6	...	...	1	...	...	9	...	...	...	14	...	...	...
Femoral	122	...	...	...	...	...	...	...	...	...	1	..	...	2	2	...	...
Umbilical	40	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...
Ventral	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Various	5	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Total	315	16	2	6	..	...	1	...	...	9	1	...	...	16	2	...	...

Group B.—

VARIETY.	Age.	0—5				5—10				10—20				20—30			
	Total.	Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Bands and adhesions	66	1	...	2	...	3	2	2	1	4	2	3	2	4	6	1	2
Meckel's diverticulum	7	...	1	...	...	...	...	...	...	...	...	1	...	2	1	...	...
Volvulus	5	...	...	...	...	...	...	...	...	...	1	1	...	..	...	3	..
Internal hernia	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Impacted gall-stone	2	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Simple stricture	3	...	...	...	...	1	...	...	..	...	...	...	...	...	...	...	...
Granuloma of ileum	2	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...
Strangulation by mesentery	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Entero-spasm	5	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...
Total	93	1	1	2	...	5	2	3	1	4	4	6	2	6	7	4	2

STATISTICAL TABLES.

External Strangulation.

30—40				40—50				50—60				60—				Result.				Mortality.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
21	1	2	...	9	2	5	...	12	2	4	...	22	3	6	2	103	11	23	2	17·9 per cent.
3	7	...	1	3	23	1	3	3	19	2	6	8	31	1	6	19	83	4	16	16·4 „
1	.	...	...	...	5	..	2	...	5	1	3	1	10	4	8	2	20	5	13	45 „
...	1	...	1	...	2	...	...	1	1	...	...	1	2	...	...	2	6	...	1	11·1 „
...	...	1	...	...	...	...	1	...	...	...	...	1	1	1	...	1	1	2	1	
25	9	3	2	12	32	6	6	16	27	7	9	33	47	12	16	127	121	34	33	21·27 per cent.

Non-malignant Obstruction.

30—40				40—50				50—60				60—				Result.				Mortality.
Dischd.		Died		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F	M.	F	M.	F	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	
2	...	2	2	1	3	1	2	1	3	1	..	...	5	1	4	16	21	16	13	43·9 per cent.
...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2	2	3	...	42·8 „
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	4	...	
...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	
...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	
...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	2	...	1	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	
...	...	...	...	...	...	...	...	1	..	...	...	...	...	...	...	1	...	...	...	
...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	3	2	...	...	
2	1	3	2	3	3	2	2	3	3	2	2	1	5	3	4	25	26	27	15	45·1 per cent.

GROUP C.—

SITE OF OBSTRUCTION.	Age.	0—5				5—10				10—20				20—30			
	Total.	Discld.		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Cæcum	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Transverse colon	11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Splenic flexure	10	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...
Descending colon	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ilio-pelvic colon	28	...	...	...	...	...	...	..	...	..	...	...	...	...	1	...	1
"Colon"	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rectum	16	...	...	...	...	. .	...	...	...	...	...	...	...	...	...	...	...
Pressure of malignant growth from without	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disseminated growth	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	82	...	...	...	...	...	...	...	...	...	...	..	..	...	1	...	1

GROUP D.—

VARIETY.	Age	0—6 mos.				6—12 mos.				12—18 mos				18 mos.–2 yrs.			
	Total.	Discld		Died.		Discld.		Died.		Discld.		Died.		Discld.		Died.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F
Entero-colic	102	13	8	8	1	14	11	8	9	3	2	1	...	...	1	...	...
Enteric	12	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...
Cæcal or colic	5	1	...	..	...	...	1	...	...	...	...	...	...	...	...	...	...
Variety not stated	6	...	2	...	...	...	1	1	...	2	...	...	...	...	...	...	...
Total	125	14	10	8	1	14	14	9	9	5	2	1	...	...	1	1	...

—	—	0—5				5—10				10—20				20—30			
Grand total	615	62	36	31	11	9	8	4	1	13	5	6	2	22	10	4	3

Malignant Obstruction.

30—40				40—50				50—60				60—				Result.				Mortality.
Dischd.		Died.		Dischd.		Died.		D schd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	
...	...	...	...	...	1	1	...	...	...	...	...	1	...	1	1	1	1	2	1	
...	...	1	...	...	...	...	...	...	...	...	1	...	1	3	5	...	1	4	6	
...	...	...	...	1	1	...	1	1	1	1	...	1	2	1	1	3	4	2		
...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...		
...	1	...	...	2	...	1	3	3	3	2	2	1	5	3	5	8	8	7		53·5 per cent.
...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...		
...	...	...	...	1	...	...	2	...	1	...	4	...	4	2	8	1	5	2		43·8 per cent.
...	...	...	...	...	...	...	...	1	...	2	...	...	1	...	...	1	1	2		
...	1	1	...	...	...	...	1	1	...	1	...	1	...	...	1	3	1	1		
...	2	2	...	2	6	2	1	7	6	5	7	8	4	16	12	17	19	25	21	56 per cent.

Intussusception.

2—5				5—10				10—20				20—				Result.				Mortality.
Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		Dischd.		Died.		
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	
10	4	2	1	2	2	1	...	...	...	...	...	1	...	...	...	43	28	20	11	50·4 per cent.
2	..	2	...	2	2	...	...	...	...	...	...	...	..	1	1	4	3	4	1	41·7 „
...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	4	...	...	
...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3	1	...	
12	6	4	1	4	5	1	...	...	...	...	...	1	..	1	1	50	38	25	12	29·6 per cent.

30—40				40—50				50—60				60—				Total.				Mortality.
28	12	8	4	17	41	10	9	26	36	14	19	42	56	34	32	219	204	111	81	31·2 per cent.

GROUP A.—*External*

I = Ingninal. F = Femoral. U = Umbilical.

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
1	F.	5	I.	R.	1 year	3 days	124	Ileum	Reduced
2	M.	51	I.	R.	Many years	3 days	100	,,	,,
3	F.	75	I.	R.	25 years	1 day	120	,,	,,
4	M.	30	I.	R.	5 hours	5 hours	64	Ileum and omentum	,,
5	M.	81	I.	L.	25 years	2 days	106	5 in. of ileum with black patches, and sigmoid colon *en glissade*	Reduced after invagination of doubtful spots
6	M.	27	I.	L.	18 mos.	10 hours	80	Ileum and omentum	Reduced
7	M.	89	I.	R.	Several years	2 days	88	Ileum	,,
8	M.	36	I.	R.	5 years	4 hours	84	,,	,,
9	M.	23	I.	L.	6 hours	6 hours	96	,,	,,
10	M.	40	I.	R.	16 years	2 days	100	Ileum and omentum (also colon)	,,
11	M.	24	I.	R.	Congenital	4 hours	84	Ileum and omentum	,,
12	M.	1	I.	R.	Do.	?	150	Ileum, lowest part	,,
13	M.	51	I.	R.	15 years	2 days	120	Ileum, 2½ in. gangrenous	Resection 2 ft., and axial anastomosis
14	F.	76	I.	L.	36 years	36 hours	80	Ileum	Reduced
15	M.	54	I.	L.	7 mos.	11 hours	108	Ileum gangrenous	Resection 2½ ft., and axial anastomosis with Murphy's button
16	M.	42	I.	L.	Several years	3 days	120	3 in. of ileum gangrenous, with mesenteric thrombosis	Resection 6 in., and axial anastomosis
17	M.	64	I.	R.	28 years	22 hours	140	Ileum	Reduced

Strangulation.

V = Ventral. O = Obturator.

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Foster	$CHCl_3$	Discharged 8th day	Free fluid in hernia sac sterile.
,,	Gas and ether	Discharged 13th day	A Richter hernia.
Sac ligatured	Local	Discharged 11th day	Local anæsthesia with Barker's solution.
Foster	$CHCl_3$	Discharged 14th day	—
Drainage through the sac	Local	Discharged 34th day	A.B.C. serum 25 c.c. injected at operation. Temperature never higher than 101° F.; normal on 5th day when tube was removed. Local anæsthesia with Barker's solution.
Foster	Gas and ether	Discharged 15th day	Slight bronchitis after operation.
,,	Local	Discharged 63rd day	Also had enlarged prostate which necessitated suprapubic cystotomy 18 days after operation. Local anæsthesia with Barker's solution.
,,	Gas and ether	Discharged 14th day	—
,,	Do.	Discharged 17th day	Post-operative bronchitis culminating in signs of phthisis.
,,	$CHCl_3$	Discharged 28th day	Hæmatoma and stitch sinus.
,,	Gas and ether	Discharged 17th day	—
,,	$CHCl_3$	Discharged 10th day	Prolonged taxis elsewhere before admission. Four hours after operation considerable rectal hæmorrhage and several times subsequently. Pyrexia up to 101° F. for 5 days.
Sac ligatured	,,	Discharged 35th day	A.B.C. serum injected at operation, and twice subsequently. Scrotal hæmatoma formed after operation. Pyrexia up to 101° F. for 4 weeks.
Drainage through the sac	C.E.	Died 4th day	(See notes below.)
Foster	,,	Died 5th day	Temperature rose to 106° F. before death. (See notes below.)
Partial suture and drainage through the sac	$CHCl_3$	Died 5th day	Tube removed on 3rd day. Rhonchi and crepitations heard at both bases. Became delirious before death. (See notes below.)
Foster	Local	Died 13th day	Almost pulseless on admission, practically moribund, in a state of severe shock. Local anæsthesia with Barker's solution. (See notes below.)

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
18	F	74	I.	R.	30 years	4 days	88	Ileum gangrenous	Resection 5 in., and axial anastomosis
19	M.	69	I.	R.	?	?	100	Ileum	Reduced
20	M.	46	I.	R.	5 years	24 hours	80	,,	,,
21	M.	70	I.	R.	14 years	7 hours	88	,,	,,
22	M.	44	I.	R.	7 years	24 hours	72	,,	,,
23	M.	69	I.	R.	20 years	17 hours	92	,,	,,
24	M.	18	I.	R.	24 hours	24 hours	84	Ileum—gangrenous spot	Reduced after invagination of doubtful area
25	M.	42	I.	L.	36 hours	36 hours	112	Ileum	Reduced
26	F.	73	I.	R.	4 weeks	4 hours	72	Cæcum and appendix	,,
27	M.	65	I.	R.	10 years	9 hours	72	Ileum	,,
28	F.	50	I.	R.	?	?	96	,,	Laparotomy and reduction
29	M.	39	I.	R.	8 days	8 days	88	Ileum gangrenous	Resection. Paul's tubes tied into both ends
30	M.	59	I.	R.	15 years	12 hours	84	Ileum	Reduced
31	M.	22	I.	R	2 days	2 days	60	,,	,,
32	M.	13	I.	R.	12 years	2 days	96	,,	,,
33	M.	27	I.	R.	20 years	6 hours	80	,,	,,
34	M.	59	I.	R.	2 years	30 hours	84	Ileum—gangrenous spot	Reduced after invagination of doubtful area
35	M.	3	I.	R.	?	18 hours	140	Ileum	Reduced
36	M.	17	I.	R.	Recurrent 6 years	30 hours	128	Ileum and omentum	Reduced. Omentum amputated
37	M.	16	I.	R.	12 hours	12 hours	68	Ileum	Reduced
38	M.	38	I.	L.	15 years	6 hours	72	Ileum and testis undescended	Reduced; orchidectomy

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Drainage through the sac	Local	Died 9th day	Local anæsthesia with Barker's solution. The patient did well for the 1st week, and then sank suddenly. (See notes below.)
Foster	$CHCl_3$	Died 2nd day	(See notes below.)
,,	C.E.	Discharged 11th day	—
,,	$CHCl_3$	Discharged 12th day	—
,,	Gas and ether	Discharged 12th day	—
,,	C.E.	Discharged 14th day	—
,,	Gas and ether	Discharged 14th day	The gangrenous spot was due to a Richter strangulation of one of the coils in a loculus of the sac.
,,	$CHCl_3$	Discharged 14th day	—
Partial suture	Local	Discharged 28th day	Wound suppurated.
Foster	C.E.	Discharged 13th day	—
,,	$CHCl_3$	Discharged 19th day	"Reduction *en masse*" before admission. Symptoms of obstruction persisted. Laparotomy revealed a Richter hernia of the ileum.
—	Gas, ether, and $CHCl_3$	Discharged 31st day	On the 8th day the free ends of the ileum were anastomosed end to end.
Bassini	C.E.	Discharged 15th day	—
Foster	Gas and ether	Discharged 14th day	—
,,	$CHCl_3$	Discharged 13th day	—
,,	,,	Discharged 14th day	—
,,	Gas and ether	Died 36th day	Profuse diarrhœa on the 6th day. Wound suppurated and fæcal fistula formed. (See notes below.)
Sac ligatured	Spinal	Discharged 19th day	Operation was followed by transient symptoms of meningeal irritation such as head retraction, strabismus, etc.
Foster	C.E.	Discharged 15th day	—
,,	Open ether	Discharged 12th day	—
,,	C.E.	Discharged 13th day	—

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
39	M.	33	I.	R.	16 years	14 hours	96	Ileum and omentum	Reduced
40	M.	54	I.	R.	4 years	11 hours	64	,,	,,
41	M.	64	I.	L.	20 years	24 hours	80	Ileum	,,
42	M.	14 days	I.	R.	1 day	1 day	120	,,	,,
43	M.	40	I.	R.	7 years	2 days	80	,,	,,
44	M.	72	I.	L.	10 years	24 hours	102	,,	,,
45	F.	2	I.	R.	4 hours	4 hours	120	,,	,,
46	M.	19	I.	R.	?	2 days	?	Ileum, 12 in. gangrenous	Resection 2 ft.; end to side anastomosis
47	M.	18	I.	R.	2 years	9 hours	108	Ileum and omentum	Reduced; omentum amputated
48	M.	6 wks.	I.	R.	24 hours	6 hours	140	Ileum	Reduced
49	M.	62	I.	R.	Years	3 days	96	Ileum gangrenous	Resection 7 in.; Paul's tubes tied into both ends
50	M.	44	I.	R.	Many years	3 days	112	Ileum, and testis undescended	Reduced
51	M.	49	I.	R.	18 years	10 hours	120	Do.	Reduced; orchidectomy
52	M.	10 mos.	I.	R.	Congenital	6 hours	144	Ileum, cæcum, and appendix	Reduced; appendicectomy
53	M.	25	I.	R.	2 years	6 hours	72	Ileum	Reduced
54	M.	37	I.	R.	Congenital	24 hours	112	Cæcum and appendix	,,
55	M.	74	I.	R.	8 years	2 hours	76	Ileum	,,
56	M.	41	I.	L.	25 years	2 days	92	,,	,,
57	M.	50	I.	R.	8 years	2 days	68	,,	,,
58	M.	24	I.	L.	Congenital	6 hours	64	,,	,,
59	M.	62	I.	R.	48 years	8 hours	80	,,	,,
60	M.	53	I.	R.	2 hours	2 hours	76	,,	,,

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Foster	C_2H_5Cl and ether	Discharged 20th day	Wound suppurated.
,,	Spinal	Discharged 12th day	—
,,	C.E.	Discharged 15th day	Slight bronchitis after operation. Temperature normal in a week.
Sac ligatured	Spinal	Discharged 2nd day	—
Foster	C.E.	Discharged 12th day	—
,,	$CHCl_3$	Discharged 15th day	Mild post-operative delirium.
,,	,,	Discharged 11th day	—
—	C.E.	Discharged 31st day	The ileum was gangrenous in its terminal 12 in., and had nearly perforated at each constriction ring. Bowels open 2nd day. Perineal abscess incised 8th day.
Foster	$CHCl_3$	Discharged 11th day	—
,,	,,	Discharged 9th day	—
—	,,	Died 6th day	Lateral ileo-cæcostomy performed on 5th day. Mild post-operative delirium. P.M.—Anastomosis sound. No peritonitis. Bronchitis and emphysema. Pleural adhesions.
Bassini	C.E.	Died 2nd day	P.M.—1 ft. of ileum gangrenous, commencing 30 in. above the ileo-cæcal valve. Both lungs congested. Pleural adhesions.
Foster	$CHCl_3$	Died 2nd day	Second day, continued signs of obstruction. Laparotomy; abdomen full of blood-stained fluid. No obstructing agent found. Drainage. (See notes below.)
Sac ligatured	,,	Discharged 7th day	—
Foster	C.E.	Discharged 12th day	—
,,	,,	Discharged 17th day	—
,,	Spinal	Discharged 16th day	—
,,	,,	Discharged 13th day	—
,,	C.E.	Discharged 15th day	—
,,	Spinal	Discharged 13th day	—
,,	,,	Discharged 16th day	—
,,	,,	Discharged 20th day	Wound suppurated.

GROUP A.—*External*

Case	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
61	M.	47	I.	R.	?	8 hours	80	Ileum and omentum	Reduced
62	M.	34	I.	L.	Congenital	6 hours	108	Ileum	..
63	M.	32	I.	L.	7 hours	7 hours	72	Ileum and omentum	..
64	M.	1	I.	R.	4 days	6 hours	112	Ileum	..
65	M.	39	I.	L.	15 years	8 hours	80	Ileum gangrenous	Resection 8 in. and axial anastomosis
66	M.	62	I.	L.	Recurrent 3 weeks	3 days	84	Pelvic colon *en glissade*	Reduced
67	M.	74	I.	L.	2 years	3 days	81	Ileum and omentum	Reduced; omentum amputated; orchidectomy
68	M.	58	I.	L.	2 years	6 hours	?	Ileum, and pelvic colon *en glissade*	Reduced
69	M.	34	I.	R.	1 day	1 day	96	Ileum gangrenous	Resection 3 in. and axial anastomosis
70	F.	2	I.	L.	2 days	2 days	132	..	Laparotomy, resection 6 in., and axial anastomosis
71	F.	46	I	L.	3 days	3 days	80	..	Resection 8 in. and axial anastomosis
72	M.	36	I.	L.	3 years	24 hours	88	Ileum	Reduced
73	M.	36	I.	R.	36 years	24 hours	92	Ileum and omentum	..
74	M.	1	I.	R.	Congenital	6 hours	108	Ileum, cæcum, and appendix	..
75	M.	2	I.	R.	2 hours	2 hours	104	Ileum	
76	M.	5 mos.	I.	R.	Congenital	24 hours	140	..	..
77	M.	70	I.	R.	Several years	2 days	96	Ileum—gangrenous spot	Reduced after invagination of doubtful area
78	M.	43	I.	L.	24 years	3 days	120	Ileum gangrenous and omentum	Resection 4 ft. and lateral anastomosis; omentum reduced; orchidectomy
79	M.	9 wks.	I.	R.	1 day	1 day	120	Ileum	Reduced
80	M.	58	I.	R.	16 years	6 hours	84	Ileum gangrenous	Resection 5 ft. and axial anastomosis
81	M.	7 mos.	I.	R.	?	?	156	Cæcum and appendix	Reduced; appendicectomy
82	M.	60	I.	R.	?	3 days	96	Ileum	Laparotomy and reduction

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Bassini	Gas and ether	Discharged 10th day	—
Foster	Spinal	Discharged 20th day	Wound suppurated.
,,	Gas and ether	Discharged 13th day	—
Sac ligatured	Spinal	Discharged 8th day	—
Foster	C.E.	Discharged 12th day	The hernia had been reduced *en masse* before admission.
Roux's staple	Spinal	Discharged 46th day	Partial division of cord. Conjoined tendon fixed to pubes by means of staple. Wound suppurated. Orchidectomy 14th day.
Foster	C.E.	Discharged 22nd day	Peritonsillar cellulitis incised 15th day.
,,	,,	Discharged 17th day	Also had orchitis R. A very large hernia containing most of the ileum and pelvic colon.
,,	Spinal	Discharged 23rd day	—
Sac ligatured	C.E.	Discharged 17th day	Wound suppurated.
Foster	$CHCl_3$	Discharged 17th day	—
Bassini	C.E.	Discharged 13th day	—
Foster	,,	Discharged 19th day	—
Sac ligatured	,,	Discharged 11th day	—
,,	$CHCl_3$	Discharged 9th day	—
,,	,,	Discharged 10th day	—
Drainage through the sac	Local	Died 1st day	Admitted in a state of profound shock. P.M.—No peritonitis. Universal congestion of viscera. All else healthy.
Bassini	Gas and ether	Died 1st day	Severe shock on admission. P.M.—No peritonitis. Anastomosis watertight. All else healthy.
Foster	$CHCl_3$	Died 6th day	Developed enteritis after operation. (See notes below.)
,,	Gas and ether	Died 4th day	Bronchitis after operation. (See notes below.)
Sac ligatured	$CHCl_3$	Died 4th day	P.M.—Lungs emphysematous in front and collapsed behind, especially at the bases. All else healthy.
Foster	C.E.	Discharged 15th day	The ileum was obstructed by adhesions in the sac.

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
83	M.	66	I.	R.	3 years	1 day	100	Ileum	Reduced
84	M.	68	I.	R.	6 years	4 hours	56	,,	,,
85	M.	3 mos.	I.	R.	2 mos.	1 day	160	Ileum, cæcum, and appendix	Reduced; appendicectomy
86	F.	38	I.	L.	?	3 days	88	Ileum and omentum	Laparotomy and reduction
87	M.	38	I.	R.	20 years	10 hours	100	,,	Reduced
88	M.	33	I.	L.	28 years	1 day	68	Ileum	,,
89	M.	37	I.	R.	7 days	2 days	88	Ileum—gangrenous spot	Reduced after invagination of doubtful area
90	M.	9 mos.	I.	R.	3 weeks	1 day	108	Ileum	Reduced
91	F.	42	I.	R.	6 years	3 days	80	,,	,,
92	M.	19	I.	R.	2 years	30 hours	88	,,	,,
93	M.	35	I.	R.	2 years	12 hours	84	,,	,,
94	M.	16	I.	R.	12 hours	12 hours	80	Ileum and omentum	,,
95	M.	6 mos.	I.	R.	4 mos.	2 days	124	Cæcum and appendix	,,
96	M.	5 mos.	I.	R.	?	12 hours	100	Ileum	,,
97	M.	6 wks.	I.	L.	24 hours	24 hours	132	Ileum gangrenous for 3 in. and perforated	Resection 7 in. and axial anastomosis
98	M.	31	I.	R.	24 hours	12 hours	80	Ileum and omentum	Reduced
99	M	75	I.	R.	?	?	72	Ileum and appendix	Reduced, appendicectomy
100	M.	6 wks.	I.	R.	?	24 hours	140	Ileum, right testis gangrenous	Laparotomy and reduction, orchidectomy
101	M.	82	I.	R.	?	4 days	80	Ileum gangrenous	Resection; Paul's tubes tied into both ends
102	M.	47	I.	L.	4 years	1 day	92	Ileum and pelvic colon *en glissade*	Reduced
103	M.	58	I.	L.	15 years	5 days	76	Ileum	Laparotomy and reduction
104	M.	36	I.	R.	6 weeks	18 hours	76	Ileum gangrenous	Resection 6 in. and lateral anastomosis

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Foster	C.E.	Discharged 20th day	Wound suppurated.
,,	,,	Discharged 12th day	—
Sac ligatured	,,	Discharged 4th day	—
Foster	,,	Discharged 14th day	—
,,	Hedonal	Discharged 14th day	—
,,	Spinal	Discharged 19th day	—
,,	C.E.	Discharged 19th day	Retention of urine after operation.
Sac ligatured	C.E.	Discharged 10th day	Also had a left inguinal hernia, operated upon at the same time.
Foster	$CHCl_3$	Discharged 8th day	—
Bassini	C.E.	Discharged 13th day	—
Foster	,,	Discharged 13th day	—
,,	,,	Discharged 16th day	—
Sac ligatured	,,	Discharged 4th day	—
,,	,,	Died 15th day	Bronchitis after operation. Temperature up to 100° F. 1st week, and 102° F. 2nd week. (See notes below.)
Drainage through the sac	Local	Died 6th day	Subcutaneous infusion with glucose after operation. (See notes below.)
Foster	C.E.	Died 6th day	4th day symptoms of obstruction appeared. Laparotomy disclosed a coil of ileum strangulated in a properitoneal loculus of the sac. Relieved. (See notes below.)
,,	,,	Died 1st day	Almost comatose on admission. (See notes below.)
Sac ligatured	$CHCl_3$	Died 1st day	Died of shock. P.M.—Nothing of interest.
—	C.E.	Died 1st day	The gangrenous ileum had perforated into the sac and also into the abdomen. (See notes below.)
Foster	$CHCl_3$	Died 4th day	(See notes below.)
,,	C.E.	Died 3rd day	Also had umbilical and right femoral herniæ. Laparotomy to find out which was obstructed. (See notes below.)
,,	,,	Died 4th day	A Richter hernia. Obviously died of peritonitis, but there was no P.M.

GROUP A.—*Externa*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
105	M.	8 mos.	I.	R.	3 mos.	3 days	144	Ileum, cæcum, and appendix	Reduced; appendicectomy
106	M.	28	I.	R.	?	?	116	Ileum and omentum	Reduced
107	M.	70	I.	R.	3 years	3 days	72	Ileum	,,
108	M.	20	I.	L.	6 mos.	12 hours	68	,,	,,
109	M	31	I.	L.	2 years	2 days	100	,,	,,
110	M.	45	I.	L.	20 years	24 hours	76	,,	,,
111	M.	52	I.	R.	Recurrent, 12 hours	12 hours	92	,,	,,
112	M.	68	I.	R.	5 years	12 hours	64	,,	,,
113	M.	1	I.	L.	8 mos.	24 hours	160	Ileum and omentum	,,
114	M.	3 mos	I.	R.	2 days	36 hours	116	Ileum	,,
115	M.	60	I	R.	Congenital	4 days	128	Ileum and omentum	Reduced; omentum amputated
116	M.	24	I.	L.	1 year	2 days	112	Ileum gangrenous	Laparotomy, resection and lateral anastomosis
117	M.	13	I.	R.	Congenital	4 hours	96	Ileum	Reduced
118	M.	31	I.	R.	12 years	3 days	64	Ileum and omentum	Reduced; omentum amputated
119	M.	2	I.	R.	3 mos.	24 hours	148	Ileum	Reduced
120	M.	37	I.	R.	3 years	3 hours	100	,,	,,
121	M.	60	I.	R.	14 years	24 hours	100	,,	,,
122	M.	54	I.	L.	30 years	9 hours	72	,,	,,
123	M.	52	I.	R.	17 years	12 hours	72	,,	,,
124	M.	31	I.	L.	2 mos.	12 hours	64	,,	,,
125	M.	52	I.	R.	6 years	10 hours	84	,,	,,
126	M.	27	I.	L.	2 years	2 days	120	,,	,,
127	M.	67	I.	L.	40 years	2 days	100	,,	,,
128	M.	25	I.	R.	3 years	4 hours	84	Ileum and omentum	,,

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Sac ligatured	$CHCl_3$	Discharged 5th day	—
Foster	C.E.	Discharged 19th day	Also had tuberculous abscess of neck.
,,	,,	Discharged 11th day	—
Bassini	,,	Discharged 21st day	—
Foster	,,	Discharged 14th day	—
,,	,,	Discharged 15th day	—
,,	,,	Discharged 10th day	—
,,	Ethyl chloride ether	Discharged 16th day	Endothelioma of forehead excised 10th day.
Sac ligatured	C.E.	Discharged 14th day	Post-operative bronchitis.
,,	,,	Discharged 3rd day	—
Foster	,,	Discharged 17th day	Slight bronchitis after operation.
,,	,,	Discharged 20th day	Groin incision suppurated.
Sac ligatured	,,	Discharged 11th day	—
Foster	,,	Discharged 8th day	—
,,	,,	Discharged 4th day	—
,,	,,	Discharged 11th day	—
,,	C.E.	Discharged 12th day	—
,,	,,	Discharged 13th day	Melæna from 3rd to 6th day.
,,	,,	Discharged 12th day	Aortic regurgitation and emphysema.
,,	,,	Discharged 15th day	—
Bassini	,,	Discharged 15th day	—
Foster	,,	Discharged 11th day	—
,,	,,	Discharged 13th day	—
Sac ligatured	,,	Discharged 11th day	—

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
129	M.	45	I.	L.	3 years	4 days	80	Ileum and large mass of omentum; testis undescended	Reduced, omentum amputated, orchidopexy
130	F.	59	I.	L.	40 years	6 hours	84	Ileum	Reduced
131	M.	20	I.	L.	Recurrent, 5 years	4 days	108	..	,,
132	M.	39	I.	L.	18 years	4 days	88	..	,,
133	M.	28	I.	R.	12 years	12 hours	84	.	,,
134	M.	75	I.	R.	10 years	2 days	76	.	,,
135	M.	76	I.	R.	?	2 days	64	..	,,
136	M.	54	I.	L.	Years	2 days	96	,,	,,
137	M.	67	I.	R.	12 years	10 hours	84	,,	,,
138	F.	74	I.	R.	9 years	2 days	72	Ileum, right tube, and ovary	Reduced; tube and ovary removed
139	M	10 mos.	I.	R.	Congenital	24 hours	164	Ileum	Reduced
140	F.	76	F.	R.	3 years	1 day	76	..	,,
141	F.	14	F.	R.	?	A few days	104	,,	,,
142	F.	63	F.	L.	10 years	24 hours	108	Pelvic colon 2 in. deeply congested	,,
143	F.	34	F.	L.	Several years	12 hours	120	Ileum	,,
144	F.	47	F.	R.	1 year	2 days	108	,,	,,
145	F.	69	F.	L.	Several years	12 hours	120	,,	,,
146	M.	47	F.	R.	3 years	2 days	80	Ileum and omentum	Reduced; omentum amputated
147	F.	70	F.	R.	?	5 days	124	Ileum	Reduced
148	F.	72	F.	L.	14 hours	14 hours	88	,,	,,
149	F.	48	F.	R.	5 years	2 days	104	,,	,,
150	F.	33	F.	L.	6 years	3 days	112	Ileum and omentum	,,
151	M.	39	F.	L.	3 years	1 day	100	Do.	Reduced; omentum amputated
152	M.	58	F.	R.	3 years	12 hours	96	Ileum	Reduced

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Foster	C.E.	Discharged 13th day	An extra-parietal interstitial hernia 9 in. in diameter.
,,	,,	Discharged 13th day	—
,,	,,	Discharged 13th day	—
,,	,,	Discharged 10th day	—
,,	,,	Discharged 17th day	Wound suppurated.
,,	,,	Discharged 20th day	Wound suppurated.
,,	$CHCl_3$	Discharged 4th day	—
,,	C.E.	Discharged 15th day	—
,,	,,	Discharged 18th day	—
,,	,,	Discharged 22nd day	—
,,	$CHCl_3$	Died 6th day	Post-operative broncho-pneumonia. (See notes below.)
Sac ligatured	Gas and ether	Discharged 31st day	Wound suppurated. Cellulitis incised 13th day. Pus contained *Staphylococcus albus*.
Suture	Ethyl chloride and ether	Discharged 16th day	—
,,	$CHCl_3$	Discharged 13th day	—
,,	Gas and ether	Discharged 14th day	A Richter hernia.
,,	Do.	Discharged 17th day	—
,,	$CHCl_3$	Discharged 28th day	Slight bronchitis after operation.
,,	Gas and ether	Discharged 13th day	A Richter hernia.
,,	$CHCl_3$	Discharged 17th day	Radical cure of left femoral hernia performed at the same time.
,,	Gas and ether	Discharged 13th day	—
,,	Do.	Discharged 15th day	—
,,	C.E.	Discharged 14th day	—
,,	Gas and ether	Discharged 16th day	—
,,	$CHCl_3$	Discharged 14th day	—

GROUP A.—*External*

Case.	Sex.	Age.	Variety	Side.	Duration of hernia	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
153	F.	58	F.	L.	5 years	2 days	88	Ileum and omentum	Reduced omentum; amputated
154	F.	48	F.	R.	6 years	6 days	96	Ileum—gangrenous patch and omentum	Not reduced. Invagination of gangrenous area
155	M.	62	F.	R.	12 years	4 days	84	Colon and omentum	Reduced. Omentum amputated
156	F.	47	F.	R.	6 mos.	2 days	92	Ileum	Reduced
157	F.	48	F.	R.	5 mos.	36 hours	100	Ileum perforated and omentum	Reduced after suture of perforation
158	F.	59	F.	L.	1 year	2 days	100	Ileum and omentum	Reduced. Omentum amputated
159	M.	72	F.	L.	?	?	108	Do.	Do.
160	F.	59	F.	R.	30 years	3 days	112	Ileum	Reduced
161	F.	57	F.	R.	10 years	8 hours	96	,,	,,
162	F.	40	F.	R.	5 years	24 hours	82	,,	,,
163	F.	61	F.	L.	3 days	3 days	84	,,	,,
164	F.	45	F.	L.	35 years	3 days	88	Ileum gangrenous	Resection 2 ft. and axial anastomosis
165	F.	63	F.	L.	9 mos.	5 days	96	Ileum gangrenous and perforated	Laparotomy, resection 2 ft., and axial anastomosis
166	F.	64	F.	R.	20 years	1 day	100	Ileum	Reduced
167	F.	66	F.	R.	Several years	28 hours	96	,,	,,
168	F.	66	F.	R.	Several months	24 hours	84	,,	Laparotomy and reduction
169	F.	48	F.	R.	9 years	10 days	100	Ileum—gangrenous spot	Reduced after invagination of doubtful area
170	M.	26	F.	R.	3 years	3 days	72	Do.	Do.
171	M	61	F.	R.	1 day	1 day	76	Ileum	Reduced
172	F.	59	F.	L.	4 years	1 day	84	,,	,,

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	$CHCl_3$	Discharged 26th day	Radical cure of right femoral hernia performed at the same time.
Drainage through the sac	Gas and ether	Died 2nd day	A Richter hernia which had ruptured into the sac. (See notes below.)
Suture	$CHCl_3$	Discharged 11th day	Right thigh and forearm had been amputated 30 years previously for injuries. Died after subsequent operation for gall-stones.
,,	Gas and ether	Discharged 14th day	Hæmatoma.
,,	$CHCl_3$	Discharged 16th day	—
,,	,,	Discharged 16th day	—
,,	Gas and ether	Discharged 30th day	Post-operative bronchitis. Wound suppurated.
,,	Do.	Discharged 37th day	Wound suppurated.
,,	C.E.	Discharged 17th day	—
,,	Gas and ether	Discharged 14th day	—
,,	Spinal	Discharged 13th day	—
Drainage through the sac	$CHCl_3$	Discharged 6th month	A.B.C. serum given at operation. 8th day fæcal fistula appeared. 16th day, laparotomy and entero-anastomosis. Fistula had closed at discharge.
Suture	,,	Discharged 25th day	Both wounds suppurated.
,,	Spinal	Died 4th day	(See notes below.)
,,	$CHCl_3$	Died 3rd day	Ileostomy performed on 2nd day for unrelieved obstruction. A.B.C. serum injected at first operation. P.M.—No marked peritonitis.
,,	,,	Died 2nd day	Hernia had become irreducible 4 days before admission, and had been reduced elsewhere. At operation, 6 in. of ileum were found in peritoneal pocket close to the crural canal. (See notes below.)
,,	C.E.	Discharged 33rd day	The patient also had ascites of unknown origin.
,,	$CHCl_3$	Discharged 12th day	A Richter hernia.
,,	Gas and ether	Discharged 16th day	—
,,	Do.	Discharged 12th day	—

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
173	F.	55	F.	R.	3 mos.	3 days	84	Ileum	Reduced
174	F.	58	F.	L.	18 years	3 days	120	Ileum—gangrenous spot and omentum	Reduced after invagination of doubtful area; omentum amputated
175	F.	45	F.	L	2 years	4 days	84	Ileum	Reduced
176	F.	60	F.	L.	14 years	4 days	80	,,	,,
177	F.	42	F.	R.	2 years	2 days	88	,,	,,
178	F.	30	F.	R.	20 years	6 hours	76	Ileum and omentum	Reduced; omentum amputated
179	M.	58	F.	R.	2 years	36 hours	96	Ileum gangrenous	Laparotomy; resection 9 in., and axial anastomosis.
180	F.	56	F.	R.	Recurrent 9 mos.	18 hours	100	Ileum and omentum	Reduced; omentum amputated
181	F.	45	F.	R.	20 years	1 day	88	Ileum	Reduced
182	F.	65	F.	R.	6 mos.	16 hours	80	Ileum and omentum	Reduced; omentum amputated
183	F.	45	F.	L.	10 years	3 days	96	Ileum	Reduced
184	F.	67	F.	R.	8 days	8 days	112	,,	,,
185	F.	71	F.	L.	8 years	3 days	80	,,	,,
186	F.	52	F.	R.	25 years	3 days	112	Ileum and omentum	Reduced; omentum amputated
187	M.	62	F.	R.	?	24 hours	112	Ileum—gangrenous spot	Reduced after invagination of doubtful area
188	F.	71	F.	R.	7 years	2 days	112	Ileum	Reduced
189	M.	49	F.	R.	3 days	3 days	112	Ileum gangrenous and omentum	Resection of a short length; Paul's tubes tied into both ends
190	F.	67	F.	R.	7 days	6 days	96	Ileum gangrenous	Gut incised and sutured to edges of wound; drainage by catheter
191	F.	58	F.	L.	15 years	4 days	112	Ileum gangrenous and omentum	Resection and lateral anastomosis. Omentum amputated
192	M.	57	F.	R.	3 days	3 days	96	Do.	Laparatomy, resection and drainage by Paul's tubes; omentum amputated

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	Gas and ether	Discharged 19th day	—
,,	C.E.	Discharged 14th day	—
,,	$CHCl_3$	Discharged 13th day	—
,,	Local	Discharged 16th day	Local anæsthesia with novocain.
,,	Gas and ether	Discharged 13th day	—
,,	$CHCl_3$	Discharged 14th day	—
,,	,,	Discharged 30th day	A Richter hernia. Bowels open naturally on 2nd day. Laparotomy wound suppurated.
Roux	,,	Discharged 16th day	—
Suture	C.E.	Discharged 14th day	—
,,	$CHCl_3$	Discharged 12th day	—
,,	,,	Discharged 16th day	—
,,	,,	Discharged 13th day	A Richter hernia.
Sac ligatured	,,	Discharged 14th day	Slight suppuration.
Suture	,,	Discharged 19th day	—
Drainage through the sac	Local	Died 2nd day	Fractured femur 6 weeks previously, followed by pneumonia, from which the man had just recovered. A Richter hernia. Local anæsthesia with novocain. (See notes below.)
Suture	,,	Died 3rd day	Local anæsthesia with novocain. (See notes below.)
Drainage through the sac	C.E.	Died 7th day	A Richter hernia which had perforated into the sac. P.M.—Gangrene at the point of section; peritonitis.
—	$CHCl_3$	Died 3rd day	Suppuration had occurred in the sac. (See notes below.)
Sac ligatured	,,	Died 5th day	Saline infusion and A.B.C. serum administered after operation. P.M.—Local peritonitis; right-sided pleurisy and pneumonia.
—	,,	Died 2nd day	A Richter hernia. Saline administered after operation. P.M.—No peritonitis.

GROUP A.—*External*

Case	Sex.	Age.	Variety	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
193	F.	58	F.	R.	10 years	5 days	96	Ileum and omentum	Reduced; omentum amputated
194	F.	58	F.	R.	1 year	7 days	132	Ileum—gangrenous spot	Reduced after invagination of gangrenous area
195	F.	49	F.	L.	10 years	24 hours	112	Ileum	Reduced
196	M.	70	F.	L.	5 mos.	12 hours	84	Ileum and omentum	Reduced; omentum amputated
197	F.	63	F.	L.	2 years	7 days	104	Ileum	Reduced
198	F.	53	F.	L.	12 years	2 days	84	,,	,,
199	M.	73	F.	R.	8 years	7 days	72	,,	Laparotomy and reduction
200	M.	79	F.	L.	6 years	24 hours	60	,,	Reduced
201	F.	80	F.	R.	20 years	3 days	68	,,	,,
202	F.	62	F.	L.	3 mos.	3 days	96	Ileum and omentum	Reduced; omentum amputated
203	F.	30	F.	R.	2 years	3 days	116	Ileum gangrenous	Resection 4 in. as axial anastomosis
204	F.	53	F.	R.	10 years	5 days	104	Ileum and omentum	Reduced
205	F	73	F.	R.	40 years	2 days	80	Do.	Reduced; omentum amputated
206	F.	75	F.	R.	10 years	24 hours	96	Ileum	Reduced
207	F.	71	F.	L.	10 years	4 hours	96	Ileum and omentum	Reduced; omentum amputated
208	F.	44	F.	R.	3 years	2 days	96	Ileum—gangrenous spot	Reduced after invagination of doubtful area
209	F.	39	F.	R.	3 years	2 hours	84	Ileum	Reduced
210	M.	52	F.	R.	25 years	5 hours	88	,,	,,
211	F.	63	F.	L.	22 years	8 hours	120	Ileum and omentum	Reduced; omentum amputated
212	F.	53	F.	R.	4 years	4 days	108	Ileum gangrenous	Laparotomy, resection 8 in., and lateral anastomosis
213	F.	59	F.	R.	5 years	5 days	88	Ileum gangrenous	Laparotomy, resection 6 in., and lateral anastomosis
214	F.	40	F.	R.	9 years	24 hours	100	Ileum	Reduced
215	F.	53	F.	R.	?	11 days	120	Ileum gangrenous	Resection 1½ ft., and lateral anastomosis

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	$CHCl_3$	Died 3rd day	Saline administered after operation. (See notes below.)
,,	,,	Died 2nd day	The bowel had perforated into the sac. (See notes below.)
Sac ligatured	Gas and ether	Died 4th day	(See notes below.)
Suture	C.E.	Discharged 16th day	—
,,	,,	Discharged 15th day	—
,,	,,	Discharged 12th day	—
,,	Spinal	Discharged 15th day	—
Sac ligatured	C.E.	Discharged 21st day	A Richter hernia.
Suture	$CHCl_3$	Discharged 13th day	—
,,	,,	Discharged 12th day	A Richter hernia.
,,	C.E.	Discharged 16th day	The bowel had perforated into the sac.
Sac ligatured	Spinal	Discharged 15th day	Admitted in a critical condition.
,,	,,	Discharged 20th day	—
Suture	$CHCl_3$	Discharged 13th day	—
,,	Gas and ether	Discharged 14th day	—
,,	C.E.	Discharged 14th day	—
,,	Spinal	Discharged 14th day	—
,,	C.E.	Discharged 46th day	Radical cure of left inguinal hernia, performed a month after the first operation.
,,	Gas and ether	Discharged 18th day	—
,,	Spinal	Discharged 40th day	A very weak heart, mitral stenosis, and œdema of legs. (See notes below.)
Sac ligatured	C.E.	Discharged 28th day	—
,,	,,	Discharged 14th day	—
Suture	,,	Died 10th day	Jaundiced on admission. The bowel had ruptured into the sac. (See notes below.)

GROUP A.—*Externa*

Case.	Sex	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
216	F.	43	F.	L.	3 years	12 days	92	Ileum and omentum	Reduced; omentum amputated
217	F.	38	F.	L.	4 days	4 days	104	Ileum	Reduced
218	F.	58	F.	R.	?	7 days	100	,,	,,
219	M.	36	F.	R.	30 years	2 days	108	,,	Laparotomy and reduction
220	F.	68	F.	L.	8 years	36 hours	120	Ileum and omentum	Reduced
221	F.	65	F.	R.	6 years	?	104	Ileum	,,
222	F.	74	F.	R.	5 mos.	5 hours	60	,,	,,
223	F.	46	F.	R.	8 years	12 hours	84	Ileum and omentum	,,
224	M.	64	F.	L.	6 mos.	2 days	104	,,	,,
225	F.	50	F.	R.	4 years	3 days	96	Ileum	,,
226	F.	60	F.	L.	Several years	7 hours	88	Ileum gangrenous, and omentum	Resection 6 in., and axial anastomosis
227	F.	27	F.	L.	4 hours	4 hours	120	Ileum	Reduced
228	F.	53	F.	L.	11 years	3 days	108	Ileum and omentum	,,
229	M.	24	F.	L.	2 years	3 hours	56	,,	Reduced; omentum amputated
230	M.	60	F.	R.	?	3 days	104	Ileum—gangrenous spot	Reduced after invagination of doubtful area
231	F.	40	F.	L.	10 years	13 hours	76	Ileum	Reduced
232	F.	56	F.	R.	6 years	5 days	140	Ileum and omentum	Reduced; omentum amputated
233	M.	47	F.	R.	6 days	2 days	82	Ileum—gangrenous spot	Laparotomy and invagination of gangrenous area
234	F.	67	F.	L.	Several years	24 hours	64	Ileum	Reduced
235	F.	65	F.	L.	15 years	12 hours	84	Ileum	,,
236	F.	53	F.	L.	4 days	4 days	112	Colon	,,
237	F.	36	F.	R.	Several years	3 days	80	Ileum gangrenous	Laparotomy, resection 12 in., and axial anastomosis

trangulation—(continued).

reatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	Local	Died 2nd day	Moribund on admission. (See notes below.)
,,	C.E.	Died 2nd day	(See notes below.)
,,	$CHCl_3$	Died 7th day	No. P.M.
—	C.E.	Discharged 16th day	—
Suture	,,	Discharged 15th day	—
,,	,,	Discharged 13th day	Wound suppurated.
,,	$CHCl_3$	Discharged 16th day	—
,,	C.E.	Discharged 11th day	—
,,	,,	Discharged 24th day	Radical cure of R. inguinal hernia performed on the 15th day.
,,	,,	Discharged 15th day	Fibroma of labium removed on 12th day.
,,	$CHCl_3$	Discharged 21st day	Accidental extravasation of fæcal matter during anastomosis. (See notes below.)
,,	Gas and ether	Discharged 14th day	Radical cure of R. femoral hernia performed at the same time.
,,	Do.	Discharged 14th day	—
,,	C.E.	Discharged 10th day	—
,,	,,	Discharged 20th day	A Richter hernia. A fæcal fistula appeared on the 7th day, and had closed by the 16th.
,,	,,	Discharged 12th day	—
,,	Gas and ether	Discharged 14th day	—
,,	C.E.	Discharged 22nd day	A Richter hernia. (See notes below.)
,,	,,	Discharged 15th day	Irregular heart. The sac also contained purulent fluid consisting of red cells, 71 per cent. of polymorphonuclear leucocytes, and 21 per cent. of small lymphocytes. About an ounce of clear fluid escaped from the wound on the 7th day when the stitches were removed.
,,	C.E.	Discharged 13th day	—
Sac ligatured	$CHCl_3$	Discharged 12th day	—
Suture	C.E.	Discharged 60th day	A Richter hernia. (See notes below.)

GROUP A.—*Extern*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intesti
238	M	55	F.	R.	Recurrent 2 days	2 days	88	Ileum, 1 in. gangrenous	Resection 2 in., a axial anastomosi
239	M.	35	F.	R	18 years	9 hours	92	Ileum and omentum	Reduced; omentu amputated
240	F.	23	F.	R.	2 years	3 hours	80	,,	Reduced
241	F.	47	F.	R.	17 years	3 hours	80	Ileum	,,
242	F.	68	F.	R.	24 hours	24 hours	104	,,	,,
243	F.	78	F.	L.	Several years	24 hours	100	Ileum and omentum	,,
234	F.	39	F.	R.	4 years	2 days	72	Ileum	,,
245	F.	59	F.	R.	Several years	1 day	80	,,	,,
246	F.	48	F.	R.	28 years	1 day	84	,,	,,
247	F.	73	F.	L.	3 days	3 days	100	Ileum and omentum	,,
248	F.	59	F.	L.	18 years	3 days	80	Ileum	,,
249	F.	65	F.	R.	6 years	1 day	88	Ileum and omentum	,,
250	F.	42	F.	R.	16 years	2 days	80	,,	,,
251	F.	46	F.	R.	4 days	4 days	80	Ileum	,,
252	M.	42	F.	R.	?	2 days	120	Ileum gangrenous	Resection 12 in. a axial anastomosi
253	F.	63	F.	R.	2 years	2 hours	88	Ileum	Reduced
254	F.	49	F.	L.	17 years	36 hours	76	,,	,,
255	F.	45	F.	R.	1 year	2 hours	80	,,	,,
256	F.	66	F.	R.	6 years	2 days	104	Ileum gangrenous	Laparotomy, rese tion 4 in., and ax anastomosis
257	F.	73	F.	R.	10 years	2 days	80	Ileum	Reduced
258	F.	41	F.	L.	3 years	2 days	80	,,	,,
259	F.	47	F.	L.	4 years	3 days	96	Ileum, 1 in. gangrenous	Laparotomy, rese tion 10 in., and axi anastomosis
260	F.	64	F.	L.	7 weeks	3 days	92	Ileum gangrenous	Resection 6 in. an axial anastomosis
261	F.	52	F.	R.	?	?	80	,,	Laparotomy, rese tion 6 in., and drai age by Paul's tub

trangulation—(continued).

reatment of hernia.	Anæsthetic.	Result.	Remarks.
—	Hedonal	Died 8th day	(See notes below.)
Suture	C.E.	Discharged 12th day	Slight bronchitis after operation.
,,	,,	Discharged 13th day	—
,,	,,	Discharged 15th day	—
,,	,,	Discharged 13th day	—
,,	,,	Discharged 11th day	—
,,	C.E.	Discharged 14th day	—
,,	,,	Discharged 12th day	—
,,	,,	Discharged 14th day	—
,,	,,	Discharged 16th day	—
,,	,,	Discharged 20th day	Slight bronchitis after operation.
,,	,,	Discharged 11th day	—
,,	,,	Discharged 14th day	Slight bronchitis after operation.
,,	,,	Discharged 13th day	
,,	,,	Discharged 12th day	
,,	,,	Discharged 11th day	—
,,	,,	Discharged 12th day	—
,,	,,	Discharged 12th day	—
,,	,,	Discharged 25th day	Bowel ruptured during herniotomy. Radical cure of L. femoral hernia performed at the same time.
,,	,,	Discharged 20th day	Weak irregular heart. Slight suppuration.
,,	,,	Discharged 12th day	—
,,	,,	Discharged 25th day	Both wounds suppurated. Slight bronchitis after operation. Readmitted with recurrence subsequently.
,,	,,	Died 1st day	(See notes below.)
Drainage through the sac	,,	Died 25th day	(See notes below.)

GROUP A.—*Extern*

Case	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine
262	F.	42	U.	—	Several years	1 day	96	Ileum and omentum	Reduced; omentum amputated
263	F.	65	U.	—	8 years	1 day	106	Ileum	Reduced
264	F.	52	U.	—	Many years	3 days	100	Ileum and omentum, also transverse colon	Reduced; omentum amputated
265	F.	54	U.	—	Recurrent 18 years	3 days	120	Transverse colon and omentum	Do.
266	F.	61	U.	—	23 years	1 day	96	Ileum and omentum	,,
267	F	65	U.	—	16 years	4 days	116	Ileum, gangrenous spot, and omentum	Reduced after invagination of gangrenous area; omentum amputated
268	F.	53	U.	—	Several years	5 days	?	Ileum and omentum suppurating	Ileostomy
269	M.	38	U.	—	4 months	1 day	72	Ileum	Reduced
270	F.	60	U.	—	Several years	?	88	Ileum, stomach, colon, and omentum	,,
271	F.	61	U.	—	21 years	3 days	92	Transverse colon and omentum	Reduced; omentum amputated
272	F.	49	U.	—	12 years	3 days	88	Do.	Do.
273	F.	59	U.	—	30 years	7 hours	96	Ileum and omentum	,,
274	M.	78	U.	—	?	?	80	,,	,,
275	F.	58	U.	—	Recurrent 5 years	5 days	132	Ileum gangrenous and transverse colon	Ileostomy
276	F.	44	U.	—	17 years	1 day	112	Ileum gangrenous	Resection and drainage by Paul's tube
277	M.	60	U.	—	2 years	1 day	80	,,	Resection 12 in. and drainage by Paul tubes
278	F.	67	U.	—	Recurrent 10 years	12 hours	120	Transverse colon—gangrenous patches—and omentum	Reduced after invagination of gangrenous spots
279	F.	64	U.	—	22 years	7 days	140	Transverse colon gangrenous and omentum	Resection 8 in. and drainage by Paul tubes; omentum amputated
280	F.	66	U.	—	17 years	7 hours	88	Ileum, transverse colon, and omentum	Reduced; omentum amputated
281	F.	71	U.	—	6 years	3 days	88	Ileum and omentum	Do.
282	M.	82	U.	—	10 years	36 hours	104	,,	,,

tranqulation—(continued).

reatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	$CHCl_3$	Discharged 60th day	Wound suppurated; two incisions required.
,,	,,	Discharged 17th day	—
,,	,,	Discharged 15th day	—
,,	C.E.	Discharged 14th day	—
,,	,,	Discharged 14th day	Slight bronchitis after operation.
,,	,,	Died 2nd day	The patient arrived moribund. (See notes below.)
)rainage through the sac	Local	Died 1st day	Local anæsthesia with Barker's solution. (See notes below.)
Suture	C.E.	Discharged 16th day	—
,,	$CHCl_3$	Died 1st day	An enormous hernia; skin sloughing. (See notes below.)
,,	Gas and ether	Discharged 19th day	—
,,	$CHCl_3$	Discharged 20th day	—
,,	C.E.	Discharged 23rd day	—
,,	Gas and ether	Died 1st day	Death took place immediately after operation, and was due to aspiration of vomit. No P.M.
)rainage through the sac	Do.	Died 2nd day	The urine contained sugar. The bowel had perforated into the sac. (See notes below.)
)rainage through the sac	C.E.	Died 8th day	No P.M.
Do.	$CHCl_3$	Died 4th day	(See notes below.)
Suture	C.E.	Discharged 32nd day	—
)rainage through the sac	,,	Discharged 155th day	(See notes below.)
Suture	Gas and ether	Discharged 30th day	A hæmatoma formed and the wound suppurated.
,,	C.E.	Discharged 18th day	—
,,	Gas and ether	Discharged 26th day	Retention after operation; relieved by catheter.

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
283	F.	60	U.	—	5 years	2 days	88	Ileum, transverse colon, and omentum	Reduced; omentum amputated
284	F.	83	U.	—	8 mos.	4 days	80	Ileum and omentum	Do.
285	F.	60	U.	—	20 years	?	108	Ileum	Lateral anastomosis between afferent and efferent coils; reduced
286	M.	70	U.	—	?	4 days	108	,,	Reduced
287	F.	70	U.	—	?	?	124	Transverse colon	,,
288	M.	58	U.	—	17 years	4 hours	100	Ileum — gangrenous patches—transverse colon and omentum	Reduced after invagination of gangrenous spots
289	F.	47	U.	—	12 years	9 hours	112	Transverse colon and omentum	Reduced
290	F.	52	U.	—	20 years	6 hours	70	Ileum, 18 in. of transverse colon, and omentum	Reduced
291	F.	44	U.	—	11 years	7 hours	88	Transverse colon gangrenous and omentum	Resection 9 in. and lateral anastomosis
292	F.	48	U.	—	16 years	3 days	120	Ileum gangrenous and omentum	Resection 12 ft. and axial anastomosis
293	F.	62	U.	—	Several years	1 day	80	Ileum gangrenous	Resection 7 ft. and axial anastomosis
294	F.	67	U.	—	6 years	4 days	?	Ileum, omentum, sac, and skin gangrenous	Resection 12 in. and axial anastomosis
295	F.	42	U.	—	18 years	6 hours	104	Ileum and omentum	Reduced
296	F.	68	U.	—	6 years	7 hours	120	Ileum and transverse colon	,,
297	F.	55	U.	—	19 years	4 days	120	Ileum and omentum	Reduced; omentum amputated
298	F.	63	U.	—	8 years	5 hours	80	Ileum	Reduced
299	F.	75	U.	—	12 years	2 days	108	,,	,,
300	M.	67	U.	—	Many years	3 days	120	Ileum gangrenous	Resection 6 in. and axial anastomosis
301	F.	57	U.	—	14 years	4 days	120	,,	Resection 2 ft. and axial anastomosis
302	F.	44	V.	—	8 years	30 hours	88	Ileum and omentum	Reduced; omentum amputated
303	F.	43	V.	—	2 years	2 days	80	,,	Do.
304	F.	38	V.	—	9 years	3 days	100	Ileum gangrenous	Resection 4 ft. and ileo-cæcostomy

Strangulation—(continued).

Treatment of hernia.	Anæsthetic.	Result.	Remarks.
Suture	?	Discharged 16th day	Melæna for 12 days after operation. Wound suppurated.
,,	C.E.	Died 3rd day	(See notes below.)
,,	$CHCl_3$	Died 2nd day	The ileum was obstructed by adhesions in the sac. (See notes below.)
,,	Spinal	Died 2nd day	A Richter hernia. (See notes below.)
,,	C.E.	Died 1st day	Died half an hour after operation. (See notes below.)
,,	Spinal	Died 2nd day	(See notes below.)
,,	$CHCl_3$	Discharged 14th day	The patient was jaundiced on the 4th, 5th and 6th days after operation.
,,	C.E.	Discharged 19th day	—
,,	Hedonal	Discharged 31st day	—
Drainage through the sac	C.E.	Died 12th day	Axial anastomosis with Murphy's button. (See notes below.)
Suture	,,	Died 6th day	(See notes below.)
,,	Hedonal	Died 1st day	Obstruction was due to a peritoneal band in the sac. (See notes below.)
,,	C.E.	Discharged 16th day	—
,,	,,	Discharged 14th day	Slight bronchitis present before operation; was aggravated by the anæsthetic.
,,	,,	Discharged 19th day	—
,,	,,	Discharged 19th day	—
,,	,,	Died 11th day	Bronchitis after operation. (See notes below.)
,,	,,	Died 2nd day	Operation was followed by hæmatemesis. (See notes below.)
,,	,,	Died 2nd day	The skin was gangrenous. Temperature and pulse rose steadily till death. No P.M.
,,	$CHCl_3$	Discharged 19th day	Sub-umbilical incisional hernia.
,,	C.E.	Discharged 17th day	Incisional hernia. Wound suppurated.
,,	Gas and ether	Died 2nd day	Incisional hernia. At the lower end of the ileum there were 3 gangrenous areas, each 6 in. long, and involving the whole circumference of the bowel. P.M.—The anastomosis was leaking slightly. Local peritonitis.

GROUP A.—*External*

Case.	Sex.	Age.	Variety.	Side.	Duration of hernia.	Duration of strangulation.	Pulse.	Site of obstruction.	Treatment of intestine.
305	F.	34	V.	—	11 days	1 day	108	Ileum and omentum	Reduced ; omentum amputated
306	F.	63	V.	—	Recurrent, 14 years	4 days	84	Ileum, colon, and omentum	Reduced
307	M.	70	V.	—	?	?	96	Ileum	,,
308	M.	50	V.	—	2 years	30 hours	88	,,	,,
309	F.	58	V.	—	14 years	2 days	80	Ileum gangrenous	Resection and axial anastomosis
310	F.	65	V.	—	Recurrent, 6 mos.	24 hours	96	Ileum	Reduced
311	F.	62	O.	R.	5 years	3 days	128	Ileum—gangrenous spot	Laparotomy and reduction
312	M.	64	—	L.	?	12 hours	64	Ileum	Reduced
313	M.	34	—	L.	10 years	7 days	?	,,	,,
314	F.	47	—	L.	2 days	2 days	80	Ileum gangrenous	Resection 5 in. and axial anastomosis Enterotomy, drainage, and suture
315	M.	65	O.	L.	2 mos.	5 days	80	Ileum	Laparotomy and reduction

Strangulation (continued).

Treatment of hernia.	Anæsthetic.	Result.	Incisional hernia.
Suture	Hedonal	Discharged 16th day	Incisional hernia.
,,	,,	Discharged 19th day	Incisional hernia.
,,	C.E.	Discharged 14th day	Epigastric hernia of spontaneous origin.
,,	?	Discharged 15th day	A hernia of the semilunar line. Case reported in 'British Journal of Surgery,' vol. i, 1914.
Suture and filigree implantation	C.E.	Discharged 43rd day	Incisional hernia. Wound suppurated. Slight bronchitis after operation. Readmitted later for removal of filigree.
Suture	$CHCl_3$	Discharged 15th day	—
Sac ligatured	Gas and ether	Discharged 23rd day	Case reported in 'Lancet,' vol. i, 1909. (See notes below.)
Suture	$CHCl_3$	Discharged 16th day	A para-inguinal properitoneal hernia. The man had had a left inguinal hernia 40 years.
,,	,,	Died (? date)	A para-inguinal properitoneal hernia. P.M. —General peritonitis.
,,	Spinal	Died 17th day	An interstitial hernia of the left inguinal region. Operation followed by melæna, a fæcal fistula formed and caused infective gangrene of the wound. No pulmonary complications. No P.M.
—	Hedonal	Died 1st day	(See notes below.)

ADDITIONAL NOTES.

(Group A.)

Case 14.—Urine normal. At operation the ileum was found to be obstructed at two points, (*a*) at the neck of the sac, and (*b*) a Richter's hernia caught in a loculus of the sac situated over the femoral vessels. The abdomen contained free fluid, and the intestines were covered with lymph. One of the ileal coils was constricted and gave the appearance of having been at one time nipped in a hernial sac. The intestines were dry sponged through the sac after reduction of its contents. After operation the temperature remained subnormal, and profuse vomiting, as well as absolute constipation, continued.

P.M.—The body was emaciated. There was general peritonitis, and numerous old adhesions were found. The strangulated coil lay 50 in. above the ileo-cæcal junction; externally it was much discoloured, but internally the mucous membrane was only slightly congested. The gall-bladder contained several calculi and was surrounded by old adhesions. The stomach and first part of the duodenum were greatly dilated owing to enteroptosis. The left pleura was healthy, but the right was universally adherent. The lungs were congested. The heart was large and soft, but the valves were normal. The lower pole of the right kidney contained a large cyst, and the left kidney was hydronephrotic.

Case 15.—P.M.—The body was emaciated, and there was early general peritonitis. The anastomosis, which lay 12 in. below the duodeno-jejunal junction, was perfectly sound. Both pleuræ were densely adherent, and the lungs were congested in some parts, œdematous in others. The heart showed aortic incompetence, mitral stenosis, and other evidence of past endocarditis; the pericardium was adherent. The kidneys showed passive congestion and cloudy swelling.

Case 16.—P.M.—No general peritonitis, but a recent plastic inflammation was found in the lower half of the

abdomen. The anastomosis was sound, leaving a moderate lumen. The pleuræ were normal, but hypostatic pneumonia was present on both sides. The liver was fatty, the spleen soft, and the kidneys showed cloudy swelling.

Case 17.—Operation was followed by pneumonic signs, with very offensive sputum. The temperature ranged from 100° F. to 102° F. till death.

P.M.—Deep suppuration was found in the wound. The ileal coils were extensively matted together. The lungs showed gangrenous broncho-pneumonia on both sides, and a small empyema was present on the right. The heart was normal. The liver was fatty, the spleen very soft, and the kidneys were swollen.

Case 18.—P.M.—There was general peritonitis, the anastomosis having given way owing to the sodden condition of the bowels. The liver was small and fatty, the spleen was soft, and the kidneys showed cloudy swelling.

Case 19.—P.M.—The body was greatly decomposed, and there was early general peritonitis. The ileum was livid and lustreless in its lowest 12 in. The heart was dilated and fatty, but free from valve lesions; there was extensive aortic atheroma. The pleura was thickened and adherent at both apices. There was chronic perisplenitis, the liver was decomposed, and the kidneys were soft and swollen.

Case 34.—P.M.—The body was emaciated, and decomposition was commencing. The wound was foul and gangrenous. There was no peritonitis. The lungs were emphysematous but free from pneumonia. Old adhesions were found at both apices, and a small empyema at the right base. The heart was normal.

Case 51.—P.M.—No peritonitis. Two inches of ileum had been incarcerated, and within this portion were found numerous small ulcers from some of which hæmorrhage had occurred. The lower part of the ileum was full of blood.

Case 79.—P.M.—There was no peritonitis. A great excess of mucus was found in the stomach and intestines. The liver was pale and mottled, and the spleen congested. All else was healthy.

Case 80.—P.M.—There was no peritonitis. Pleural adhesions were found on both sides, and tuberculous cavities

at both apices. Isolated tubercles were scattered throughout both lungs. All else was healthy.

Case 96.—P.M.—The wound was healed. The anterior parts of the lungs were emphysematous, and the posterior parts collapsed. All the bronchioles were full of pus, but there was no evident broncho-pneumonia. The right cavities of the heart were dilated. All else was healthy.

Case 97.—P.M.—The body was much wasted. The peritoneal cavity was distended with gas and fluid. The anastomosis had given way, and the two ends of gut had fallen almost completely apart.

Case 98.—P.M.—There was general peritonitis. Gangrenous patches were found in the lower third of the ileum. The lungs were congested and œdematous. A yellowish green mass about the size of a pea was found attached to the spleen; on section this proved to consist of calcifying fibrous tissue.

Case 99.—P.M.—The intestine was healthy throughout. At one place was found a large hæmorrhage into the mesentery, but there was no evidence of infarction. Numerous adhesions were found between neighbouring coils throughout the abdomen. All else was healthy.

Case 101.—P.M.—Recent peritonitis was found. The ileostomy lay two feet below the duodeno-jejunal flexure. Adhesions were present at the right apex, and the lungs were congested.

Case 102.—P.M.—There was no peritonitis. Extravasated blood was present in the mesentery of the pelvic colon. About 3 in. of the middle ileum was black and congested. The lungs were pneumonic on both sides; the lower lobes and parts of the upper lobes were solid, and numerous large emphysematous bullæ were present along the free margins.

Case 103.—P.M.—Death was due to paralytic ileus. The ileum was greatly dilated, the coils were sticky and loosely matted together, and in places very much congested and easily torn. There was no actual gangrene or ulceration. The lungs were congested, but all else was healthy.

Case 139.—P.M.—The lowest coil of the ileum had been strangulated, and there was incipient peritonitis. The lungs were broncho-pneumonic in parts; they were emphysematous

in front and collapsed behind. The liver, spleen, and kidneys were greasy.

Case 154.—After operation profuse fæcal vomiting necessitated opening the bowel in the sac to allow escape of fæces.

P.M.—A strangulated Richter hernia of the ileum 18 in. from the ileo-cæcal valve. Fæcal extravasation had taken place into the peritoneal cavity. All else was normal.

Case 166.—P.M.—The left pleura was healthy, but the right was universally adherent. The lungs were congested and emphysematous. The heart was soft and hypertrophied, but the valves were sound. The arteries were thickened. The liver was fatty, the spleen swollen, and the kidneys granular and contracted.

Case 168.—P.M.—A coil of ileum near the middle of its length and about 6 in. long, was inflamed. There was no peritonitis. The lungs were emphysematous, and the right side of the heart dilated.

Case 187.—Operation brought about no improvement, and the man died of paralytic ileus.

P.M.—Early peritonitis was found in the lower half of the abdomen. Near the right femoral ring lay a congested coil of ileum at the junction of its middle and lower thirds; no leakage could have taken place after operation, as the coil at this point was water-tight. The lungs were congested and the bases solid; old adhesions were present at the apices. The heart was enlarged, chiefly on its left side; the aortic valves were thickened, and the aorta itself was dilated but not diseased. The spleen was surrounded by dense adhesions. The liver was fatty. The kidneys showed a few cysts and interstitial changes.

Case 188.—The bowels did not act after operation, and vomiting and other obstructive signs continued till death.

P.M.—Four inches above the ileo-cæcal valve lay a gangrenous coil of ileum surrounded by an area of localised peritonitis. The lungs were wasted and emphysematous, and the bases were congested. The heart was slightly hypertrophied, chiefly on its left side. The liver and pancreas were wasted, and the gall-bladder contained calculi. The spleen was surrounded by adhesions, and the kidneys were small, granular, and cystic.

Case 190.—On the day after operation the abdomen was opened under chloroform anæsthesia; the ileum was detached from the strangulated loop, which was left to drain *in situ*. The two free ends of the ileum were closed and united laterally. After this operation the condition of the patient was extremely grave, and infusion was required.

P.M.—The body was in a state of advanced decomposition. The anastomosis was sound, and there was no peritonitis. Calcareous plates were found on the visceral pericardium. No valve lesions were found.

Case 193.—P.M.—There was generalised peritonitis. The bases of the lungs were œdematous, and basal pleural adhesions were present on both sides. The heart was enlarged and the mitral valves stenosed.

Case 194.—P.M.—There was generalised peritonitis. An adherent mass of intestines was found 9 in. above the ileo-cæcal valve. The left pleural sac was obliterated by old adhesions, and both lungs showed passive congestion.

Case 195.—P.M.—A gangrenous coil of ileum 7 inches in length was found 8 inches from the duodeno-jejunal flexure. Old adhesions were found in the pleura and peritoneum, and calcified tuberculous nodules in the lungs.

Case 212.—A fæcal fistula appeared on the fifth day, accompanied by retention of urine and a slight degree of cystitis; retention persisted, but the fistula healed before discharge.

Case 215.—The condition of the patient was exceedingly bad after operation, requiring frequent saline administrations.

P.M.—The anastomosis had given way, causing general peritonitis. The pericardium was adherent and the heart muscle exceedingly thin. All else was healthy.

Case 216.—P.M.—The strangulated coil lay 6 in. above the ileo-cæcal valve. The gall-bladder contained calculi, and the common duct was dilated. Fatty nutmeg liver. The lungs showed acute bronchitis and œdema and old apical tuberculosis.

Case 217.—Fæcal vomiting continued after operation till death, which was therefore due to unrelieved obstruction.

P.M.—The strangulated coil lay 8 in. above the ileo-cæcal valve; there was no peritonitis. Firm pleural adhe-

sions were found on the left side, and the lungs were hard and congested. The heart was not enlarged, but there were signs of old aortic disease. There was stenosis of the tricuspid and mitral valves.

Case 226.—This patient also had severe lumbar pain and pain on micturition, with blood and albumin in the urine. Rectal and vaginal examinations were negative. A urethral caruncle was cauterised on the twentieth day.

Case 233.—The hernia was explored, when it was found that the ileum on the proximal side of the line of obstruction had perforated. During manipulation the gut slipped back into the abdomen; laparotomy was performed, and the perforation located 18 in. from the ileo-cæcal valve. The perforation was sutured. No complications ensued.

Case 237.—After operation fæcal vomiting continued for three days, but was at length relieved by gastric lavage. On the seventh day signs of dry pleurisy appeared on the right side, and shortly afterwards gave place to signs of free fluid. Aspiration was performed on the sixteenth day; the fluid was reported to be sterile, but contained polymorphonuclear cells. On the twenty-seventh day, the right side of the chest being uniformly opaque to X-rays, a rib was resected and an empyema drained. On the thirty-ninth day an intra-peritoneal abscess beneath the laparotomy wound was evacuated, and on the forty-ninth yet another abscess appeared in the axilla and was incised. From this point onwards the patient steadily gained ground, and left hospital on the sixtieth day.

Case 238.—On the seventh day the patient began to complain of abdominal pain and distension, and laparotomy was performed. Peritonitis had been caused by leakage from the line of anastomosis near the mesenteric attachment. The aperture was sutured, and the paralysed bowel drained in several places, which were closed before the operation was completed. The pus was found to contain *B. coli*. On the following day the patient died.

P.M.—General peritonitis. The anastomotic line was still leaking, and the lumen of the bowel at this point was almost obliterated by swollen mucous membrane.

Case 260.—This patient had travelled twenty miles and

arrived moribund with faecal vomiting. She was operated upon after a short rest in bed, during which time stimulants were administered. She died almost immediately after the operation had been completed.

P.M.—The lungs were congested and heavy. Extensive arterial disease was found, and the heart muscle was fatty. Numerous diverticula of the ileum were present along its mesenteric attachment. Other pathological lesions included a large ovarian cyst, a cystic adenoma of the thyroid, and an umbilical hernia.

Case 261.—This patient presented herself with a large abscess in the right groin and cellulitis of the thigh. The abdominal symptoms were very slight, and barely aroused suspicion. On incision, the abscess was found to contain a a coil of gangrenous ileum which had perforated into the sac. The mesentery being too short to allow of resection *in situ*, the abdomen was opened and the gangrenous gut delivered. The condition of the circulation was so bad that it was some time before the adjacent portions of ileum showed any signs of returning vitality; eventually, however, it was decided to resect 6 in., and to drain the cut ends by means of Paul's tubes. The patient rallied, but the second stage of the operation could not be undertaken for ten days. On the tenth day, in spite of bodily emaciation and considerable skin digestion in the neighbourhood of the fistula, the ends of the ileum were detached from their surroundings, amputated, and closed, a lateral anastomosis being effected. The wound was partly closed and drained. On the seventeenth day the wound was suppurating profusely, and there was spreading cellulitis of the abdominal wall; fæcal matter escaped from time to time. From this date onwards the patient slowly sank and died on the twenty-fifth day.

P.M.—The body was extremely emaciated, and the peritoneum was locally inflamed. The lungs were dry, wasted, and emphysematous; the heart was small and friable. The liver, spleen, and kidneys were congested.

Case 267.—P.M.—A short length of the ileum was black but not gangrenous. The lungs were congested and œdematous; the heart was large and soft. The other viscera were healthy.

Case 268.—P.M.—The strangulated portion lay 7 ft. above the ileo-cæcal valve; fæcal extravasation had taken place, causing general peritonitis. The body was fat. The bases of the lungs were congested, and the heart was fatty; the spleen was large and soft. The gall-bladder contained calculi and was distended with pus. The kidneys were swollen and in a state of decomposition.

Case 270.—P.M.—General peritonitis. The whole ileum was deeply congested, and part was gangrenous. The heart was large and soft, and the lungs congested and œdematous. The liver was large and fatty. The kidneys were granular.

Case 275.—Operation was followed by tetanic contraction of the muscles of mastication.

P.M.—The body was extremely fat. Examination of the abdomen revealed a cirrhotic liver, but all the other viscera were healthy. The left pleura was adherent, and the lungs were congested and œdematous. The heart was large, fatty, and dilated. The dura mater was adherent to the skull, and the arteries at the base of the brain were thickened; the convolutions were wasted.

Case 277.—The man showed no improvement after operation and died of paralytic ileus.

P.M.—There was localised peritonitis in the umbilical region. The liver was cirrhotic, and the kidneys were granular and contracted.

Case 279.—Operation was followed by erysipelas of the abdominal wall and *B. coli* cystitis. On the ninety-sixth day the fistula was excised, and the continuity of the colon restored by Murphy's button. As the button was not passed, it was removed by laparotomy on the one hundred and forty-second day. The patient recovered, and was discharged thirteen days later.

Case 280.—P.M.—Hæmorrhage had taken place into the mesentery of the incarcerated bowel. The liver was adherent to the diaphragm and was decomposed; the gall-bladder was distended with bile and calculi. The spleen was large and soft, and the kidneys were granular and contracted. The uterus showed large fibromyomata. Old adhesions were found at the bases of both pleural sacs; the lungs showed recent hæmorrhagic broncho-pneumonia, and

their anterior borders were emphysematous. The heart was flabby and hypertrophied, but the endocardium and pericardium were normal.

Case 285.—P.M.—A coil of ileum 18 in. in length, commencing 3 in. above the ileo-cæcal valve, was twisted and matted by old adhesions, and had been incarcerated. The lumen of this portion was not quite completely obliterated; the anastomosis was sound. The lungs were congested. There were no other lesions.

Case 286.—This man attempted to cut his throat before admission, but only succeeded in dividing the skin. Operation yielded no result, as obstructive symptoms continued and the abdomen became progressively more distended. Ileostomy was performed on the second day under C.E., and death occurred shortly afterwards. No P.M.

Case 287.—P.M.—The transverse colon was deeply congested, the liver pale, and the spleen large and soft. The heart was very fatty.

Case 288.—P.M.—A coil of ileum 6 in. in length was congested but not gangrenous; hæmorrhage had taken place into the mesentery. There was no peritonitis. The heart muscle was pale and fatty. A tumour was found in the left kidney (nature not determined).

Case 292.—On the sixth day after operation, a fæcal fistula appeared, and the patient began to lose ground. On the twelfth day ileo-colostomy was performed in order to improve nutrition, and the button was removed. Death occurred shortly afterwards.

P.M.—There was general peritonitis, but the anastomosis was sound; the liver was fatty, and the gall-bladder shrunken and full of calculi. The heart was large, flabby, and friable, but free from endocarditis; the pericardium was healthy. The right pleura was in places obliterated by old adhesions. The bases of the lungs were deeply congested and œdematous; there was incipient pneumonia.

Case 293.—Operation gave no relief, and as signs of obstruction continued the abdomen was reopened on the fourth day, when the anastomosis was found to be impermeable. Three feet of ileum, including the anastomosis, were resected, and lateral ileo-transverse-colostomy was performed. Death occurred two days later.

P.M.—There was generalised peritonitis. Most of the ileum had been removed. The liver was fatty. The heart was pale and friable, and the lungs were congested. The kidneys were normal.

Case 294.—P.M.—There was no peritonitis. A columnar-celled carcinoma was found in the ascending colon, but there were no secondary growths. There was hypertrophy of the ileum throughout its length. The liver was pale and fatty. The heart was large and fatty; there were no valve lesions. The lungs were congested and œdematous; an old tuberculous focus was found at the left apex.

Case 299.—P.M.—The body was very fat; the wound had healed. The omentum and intestines were firmly adherent to the scar. Old pelvic adhesions were found, involving the back of the uterus, the pelvic colon, and omentum. The liver was pale, granular, and slightly cirrhotic; the spleen was large and congested. The heart was large, fatty, and friable. The lungs were emphysematous, and showed widespread purulent bronchitis and œdema.

Case 300.—P.M.—In the interior of the stomach were found numerous hæmorrhagic areas varying in diameter from one eighth of an inch downwards; many were ulcerated, and they were scattered chiefly over the greater curvature. The lungs were emphysematous in front, but their bases were congested and partly collapsed. The kidneys showed a moderate degree of cloudy swelling.

Case 311.—The patient had been admitted with strangulated obturator hernia on two previous occasions, respectively five years and four months before.

On this occasion a Richter hernia of the ileum had perforated into the sac. The abdomen was opened, the ileum was withdrawn, and a gangrenous patch invaginated. The obturator foramen was exposed from the thigh and the sac ligatured. Cystitis developed after operation, but was cured before discharge.

Case 315.—P.M.—There was no peritonitis. A coil of the lower ileum was found to be congested. Obturator sacs were present on both sides; the left was 2 in. long, and the right admitted the tip of the little finger.

GROUP B.—*Non-maligna*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse
316	M.	10	Band	3 days. Condition critical. Drainage of appendix abscess 1 year previously	116
317	F.	23	,,	2 days. Removal of L. appendages for tubo-ovarian cyst 1 year previously	124
318	M.	55	Adhesions	1 day. "Indigestion" for several years	100
319	F.	77	Band	4 days. Attacks of abdominal pain for several years	108
320	F.	17	Adhesions	5 days. Abdominal pain for 3 weeks	136
321	F.	49	,,	4 days. Difficult labour 8 years previously; no pregnancies since	92
322	M.	27	,,	1 day. Laparotomy on several previous occasions for injuries received in war	72
323	M.	30	,,	3 days. Many previous attacks following dysentery	80
324	M.	15	,,	3 days' vomiting. Abdominal pain 2 weeks	72
325	M.	9	,,	2 days' vomiting. Abdominal pain 6 weeks; severe 5 days	128
326	F.	64	Bands	4 days. Alternating constipation and diarrhœa for 2 months	100
327	M.	6	,,	2 days	148
328	M.	42	Band	2 days. Operation for hernia 14 years previously	76
329	F.	70	Adhesions	7 days. Abdominal pain at intervals for 20 years	100

Obstruction.

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy, division of band, and appendicectomy	$CHCl_3$	Discharged 24th day	Band running from ileum to ascending colon and occluding ileum. Continuous subcutaneous saline infusion after operation. Readmitted later with abdominal pain.
Laparotomy, division of band; incision of L. broad ligament cyst	,,	Discharged 22nd day	Band attached to anterior abdominal wall near symphysis, and encircling several coils of ileum which had twisted on their mesenteric pedicle in addition. Intravenous infusion.
Laparotomy and enterolysis	,,	Discharged 22nd day	Large number of adhesions involving ileum at pelvic brim. Cardiac massage during operation.
Laparotomy and division of band	,,	Discharged 24th day	Ileum kinked over omental band adherent to cæcum.
Laparotomy, enterolysis, and appendicectomy. Enterotomy and suture	?	Discharged 8th month	(See notes below.)
Laparotomy, enterolysis, and drainage	C.E.	Discharged 45th day	Ileum obstructed by pelvic adhesions. Slight fæcal extravasation owing to rupture of bowel during manipulation. A.B.C. serum administered. Eighth day, secondary hæmorrhage from abdominal wall; vessel ligatured. Sixteenth day, wound curetted.
Laparotomy and enterolysis	$CHCl_3$	Discharged 14th day	Tuberculous peritonitis. Adhesions in the epigastrium and in R. iliac fossa, obstructing cæcum and coils of ileum.
Laparotomy, enterolysis, and appendicectomy	,,	Discharged 19th day	Ileum obstructed by numerous adhesions. Appendix adherent to cæcum. Post-operative diarrhœa.
Laparotomy and enterolysis	,,	Discharged 27th day	Adhesions due to recent appendicitis. A little pus still present round the appendix, and contained *B. coli* and *B. enteritidis sporogenes*. Secondary abscess incised 12th day.
Laparotomy and enterolysis	C.E.	Discharged 8th day	Adhesions due to large masses of tuberculous mesenteric glands. Fæcal fistula for 1 week after operation.
Laparotomy and enterolysis; suture of peritoneal lacerations	Gas and ether	Discharged 20th day	Ileum obstructed.
Laparotomy and enterolysis	C.E.	Discharged 25th day	Ileum obstructed by band adherent to caseous mesenteric gland.
Laparotomy and division of band	$CHCl_3$	Discharged 18th day	Ileum obstructed by band running from ileum to mesentery. Saline infusion after operation. Subsequent treatment with fibrolysis.
Laparotomy and enterolysis	,,	Discharged 18th day	Ileum obstructed.

GROUP B.—*Non-maligna*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Puls
330	M.	22	Adhesions	4 days. Acute appendicitis 4 years previously	76
331	F.	11	Bands	1 day. Acute appendicitis 1 year previously	120
332	F.	50	Adhesions	2 days. Slight pain after food for several months; severe attack lasting 3 days 5 months previously	136
333	M.	9	Bands	5 days. No previous history	120
334	F.	8	Adhesions	3 days. Acute appendicitis 1 year previously	120
335	F.	25	,,	1 day. Abdominal pain 2 days	160
336	F.	53	Band	5 days. No previous history	96
337	M.	22	,,	5 days. No previous history	96
338	F.	43	,,	5 days	120
339	F.	25	Adhesions	3 days. Epigastric pain and vomiting	96
340	F.	75	Band	12 hours. Constipation 5 days	92
341	M.	31	,,	36 hours. Constipation ever since operation for acute appendicitis 7 months previously	?
342	F.	59	Adhesions	10 days. Gradual onset of constipation, vomiting, and distension	112
343	F.	46	Band	3 days. Similar attack 1 month before. Operation for fibromyomata of uterus 5 years previously	92
344	M.	24	,,	4 days. No previous history	144
345	F.	21	Adhesions	2 days. Operation for R. tubal gestation 2 years previously	120
346	F.	7	Bands	3 days. Operation for acute appendicitis 8 months previously	152
347	M.	8 mos.	Band	6 hours	136
348	F.	21	Adhesions	2 days	120

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and enterolysis	$CHCl_3$	Discharged 17th day	Ileum obstructed.
Laparotomy and division of band	,,	Discharged 18th day	Ileum kinked and twisted by band running from scar to L. side of pelvis.
Laparotomy and enterolysis	,,	Discharged 18th day	Adhesions near splenic flexure; hard pancreas and large hard lumbar glands.
Laparotomy and enterolysis	C.E.	Discharged 25th day	Numerous bands and adhesions. One band ran from mesentery to ileo-cæcal junction and obstructed a coil of ileum. Tuberculous peritonitis.
Laparotomy and enterolysis	$CHCl_3$	Discharged 21st day	Numerous bands and adhesions in the ileo-cæcal region.
Laparotomy, enterolysis, appendicectomy, and drainage	C.E.	Discharged 27th day	Recent acute appendicitis; some pus still present. Ileum kinked in the R. iliac fossa.
Laparotomy and enterolysis	$CHCl_3$	Discharged 21st day	Coil of ileum obstructed by band in pelvis. Wound suppurated.
Laparotomy and enterolysis	C.E.	Discharged 18th day	Band obstructing ileum just above the ileo-cæcal valve. Free fluid contained many small lymphocytes and a few endothelial cells.
Laparotomy and enterolysis	,,	Discharged 20th day	Band obstructing lower ileum in R. iliac fossa. Readmitted and died in the following year. (See Case 376.)
Laparotomy and enterolysis	,,	Discharged 23rd day	Adhesions due to operation for pyosalpinx 8 months previously.
Laparotomy and division of band	Gas and ether	Discharged 37th day	Band running from uterus to posterior pelvic wall, obstructing 2 ft. of ileum 18 in. above ileo-cæcal valve. Gut almost gangrenous.
Laparotomy and division of band	C.E.	Discharged 14th day	Bands about the ileo-cæcal region.
Laparotomy and enterolysis	,,	Discharged 20th day	Radical cure of umbilical hernia performed. Adhesions obstructing the ascending and transverse colon.
Laparotomy and enterolysis	,,	Discharged 25th day	Lower ileum obstructed.
Laparotomy and enterolysis. Resection 5 ft. of ileum with axial anastomosis. Drainage	,,	Discharged 33rd day	Ileum obstructed just above the ileo cæcal valve.
Laparotomy and enterolysis	,,	Discharged 13th day	Band running from R. ovary to lower ileum; also several other adhesions.
Laparotomy and enterolysis	,,	Discharged 47th day	(See notes below.)
Laparotomy and enterolysis. Infusion	$CHCl_3$	Discharged 14th day	Tuberculous peritonitis. Ileum obstructed at ileo-cæcal valve. Wound suppurated.
Laparotomy, enterolysis, and removal of L. tube	?	Discharged 3rd month	Adhesions due to salpingitis. (See notes below.)

GROUP B.—*Non-malignant*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse
349	F.	66	Band	3 days. No previous history	92
350	M.	19	Adhesions	30 hours. Operation for acute appendicitis 5 months previously	120
351	M.	18	,,	2 days. Similar attack a week before. Operation for acute appendicitis 2 years previously	112
352	F.	28	,,	2 days. Ovariotomy 1 year previously	118
353	F.	14	,,	2 days. No previous history	108
354	M.	68	,,	4 days. Attack of abdominal pain 9 months previously	96
355	M.	53	,,	10 hours. Vomiting after food during the previous 10 months	124
356	M.	42	Bands	5 days	?
357	M.	33	Band	5 days. Appendicectomy in the quiescent period 9 months previously	140
358	M.	1	Adhesions	12 hours. Passage of blood and mucus. Operation for intussusception 3 months previously	168
359	M.	25	,,	7 days. Appendicectomy 2 years previously	128
360	M.	63	Band	2 days. R. inguinal hernia reduced under chloroform 2 days before	100
361	M.	72	Adhesions	3 days. Abdominal distension 3 months	120
362	M.	75	,,	5 days	92
363	M.	11	,,	?	144
364	F.	28	Bands	2 days. Laparotomy for appendicitis 1 year previously	88
365	F.	11	Band	2 days. Melæna 5 weeks previously	140

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy, enterolysis, and appendicectomy	C.E.	Discharged 16th day	Ileum obstructed by adhesions uniting the cæcum and transverse colon.
Laparotomy and enterolysis; enterotomy and suture	,,	Discharged 35th day	(See notes below.)
Laparotomy and enterolysis; enterotomy and suture; injection of mag. sulph. into the intestine	,,	Discharged 17th day	Ileum and cæcum obstructed.
Laparotomy, enterolysis, and appendicectomy	,,	Discharged 21st day	Ileum adherent to anterior abdominal wall on the R. side, and obstructed in its course across the cæcum.
Laparotomy and enterolysis; invagination of doubtful area; drainage	$CHCl_3$	Died 1st day	Tuberculous mesenteric glands. (See notes below.)
Laparotomy and enterolysis; invagination of doubtful areas	,,	Died 2nd day	Ileum obstructed by adhesions, probably of tuberculous origin. (See notes below.)
Laparotomy and enterolysis; invagination of doubtful area in duodenum; irrigation and drainage	Gas and ether	Died 6th day	(See notes below.)
Laparotomy, division of bands, and suture of ruptured intestine; irrigation and suture	$CHCl_3$	Died 1st day	Ileum ruptured 3 in. above ileo-cæcal valve during manipulation; fæcal extravasation. P.M.—Peritonitis. Ileum scarred by pressure of bands at some previous date.
Laparotomy and division of band; infusion	C.E.	Died 1st day	(See notes below.)
Laparotomy and enterolysis	$CHCl_3$	Died 3rd day	Ileum obstructed by adhesions. No P.M.
Laparotomy and enterolysis	,,	Died 2nd day	Ileum obstructed. P.M.—Numerous adhesions; sharp ileal kink 12 in. above ileo-cæcal valve.
Laparotomy and enterolysis; enterotomy and suture; radical cure of hernia	Gas and ether	Died 3rd day	Band running from ileum to hernial sac. (See notes below.)
Laparotomy and enterolysis	$CHCl_3$	Died 3rd day	Ileum obstructed by numerous adhesions. (See notes below.)
Laparotomy and enterenterostomy	,,	Died 1st day	Ileum obstructed by adhesions, probably of tuberculous origin. (See notes below.)
Laparotomy and enterolysis; enterotomy and suture; cardiac massage	C.E.	Died 2nd day	Adhesions were due to tuberculous peritonitis. (See notes below.)
Laparotomy and enterolysis	$CHCl_3$	Died 5th day	Ileum obstructed. The bowels acted twice after operation. (See notes below.)
Laparotomy and enterolysis	,,	Died 2nd day	Ileo-cæcal junction obstructed by omental band adherent to a tuberculous mesenteric gland. P.M.—Congestion of lungs.

GROUP B.—*Non-malignan*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
366	F.	45	Adhesions	2 days	144
367	M.	4	Band	3 days. The patient arrived moribund	160
368	M.	6	Adhesions	4 days. No previous history	140
369	F.	72	,,	24 hours. Colostomy (temporary) 20 years previously. Ventral hernia	?
370	F.	67	,,	4 days. Chronic obstruction 3 weeks. Resection of carcinoma of transverse colon 2 years previously. Ventral hernia. (For previous notes, see Case 414)	96
371	M.	19	,,	6 days. Radical cure of R. inguinal hernia performed 3 months previously	130
372	F.	30	Bands	3 days. Appendicectomy 18 months previously	120
373	F.	9	Adhesions	4 days. Diarrhœa and vomiting during the previous 6 weeks	120
374	F.	29	Bands	3 days. Abdominal pain during the last few weeks. No previous history	100
375	M.	12	Adhesions	8 days' pain, gradually increasing	112
376	F.	44	,,	18 hours. Condition serious. Previous admission 1 year before. (See Case 338)	160
377	M.	32	,,	2 days. 6 previous attacks	100
378	F.	69	,,	16 hours. Long history of constipation	80
379	F.	35	,,	2 days. Gradual onset 1 month. Appendix abscess 1 year previously	84
380	M.	5	,,	4 days	140

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and enterolysis	?	Died 3rd day	Ileum adherent in pouch of Douglas; adhesions probably due to old salpingitis. (See notes below.)
Laparotomy, division of band, and ileostomy	C.E.	Died 1st day	(See notes below.)
Laparotomy and enterolysis; enterotomy and suture; invagination of doubtful area	Spinal	Died 2nd day	Ileo-cæcal region obstructed. P.M.—No peritonitis. Lower 12 in. of ileum gangrenous. Large masses of tuberculous mesenteric glands.
Laparotomy and enterolysis	C.E.	Died 13th day	Rupture of bowel and extravasation of contents during manipulation. No P.M.
Colostomy (ascending colon)	$CHCl_3$	Died 11th day	Ileum in hernial sac had a twisted mesentery. Dense adhesions round transverse colon, which was thought to be obstructed. (See notes below.)
Laparotomy and drainage	Local	Died 1st day	The condition of the patient was so serious that the operation was abandoned. (See notes below.)
Laparotomy and enterolysis; enterotomy and suture	$CHCl_3$	Died 1st day	Band obstructing ileo-cæcal region. (See notes below.)
Laparotomy and enterolysis	,,	Died 11th day	(See notes below.)
Laparotomy and division of band; resection of ileum and axial anastomosis	C.E.	Died 13th day	Resection of 2 separate loops of ileum, each 12 in. in length. Accidental fæcal extravasation during operation. Laparotomy and drainage on the 8th day. (See notes below.)
Laparotomy, enterolysis, and suture of perforations; appendicectomy	,,	Died 3rd day	Numerous adhesions due to tuberculous peritonitis. No P.M.
Laparotomy and enterolysis; resection of ileum and axial anastomosis; infusion	,,	Died 1st day	5 ft. of gangrenous ileum resected, the upper end being 4 in. below the duodenojejunal flexure. (See notes below.)
Laparotomy and enterolysis; resection 6 in. of ileum and axial anastomosis	,,	Died 5th day	Jejunum obstructed by dense adhesions between bowel and mesenteric glands. P.M.—Mesenteric glands tuberculous. Gangrene of ileum and general peritonitis.
Laparotomy and enterolysis	,,	Died 5th day	Ileum obstructed. (See notes below.)
Laparotomy and enterolysis; suture of ileum; irrigation and drainage	,,	Died 2nd day	Dense adhesions everywhere. Ileum accidentally ruptured during separation of diaphragmatic adhesions. (See notes below.)
Laparotomy and enterolysis	,,	Died 2nd day	Lower end of ileum obstructed by omental band adherent in the R. iliac fossa. Many caseous glands. P.M. — No peritonitis. Terminal 4 ft. of ileum discoloured. Adhesions at base of R. pleura.

GROUP B.—*Non-malignan*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse
381	F.	62	Band	3 days. Ovariotomy 8 years previously	120
382	M.	27	Meckel's diverticulum	17 hours. Attack of acute abdominal pain 18 years previously	80
383	M.	20	Do.	7 days' acute symptoms. Abdominal pain 9 days	78
384	F.	25	,,	5 days	120
385	F.	3	,,	2 days	128
386	M.	40	,,	14 days. Abdominal pain at intervals, becoming progressively worse. Attacks of pain, constipation, and vomiting for many years; last attack 5 years previously	140
387	M.	54	,,	3 days. Long history of abdominal pain and constipation	96
388	M.	14	,,	?	84
389	F.	13	Volvulus	2 days. Vomiting and constipation. Indefinite tender hypogastric tumour	16
390	M.	21	,,	3 days. Constipation 10 days	104
391	M.	23	,,	1 day	128
392	M.	21	,,	4 days. Constipation. Abdominal discomfort 14 days. Hypogastric tumour	88
393	M.	11	,,	2 days. Arrived moribund with profuse fæcal vomiting. Onset while swimming	136
394	M.	40	Internal hernia	2 days	100

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and enterolysis; resection 2 ft. of ileum and ileo-cæcostomy	C.E.	Died 1st day	P.M.—Light peritoneal adhesions and a few bands. A small Meckel's diverticulum was seen. Cloudy swelling of viscera.
Laparotomy, amputation of diverticulum, and appendicectomy	$CHCl_3$	Discharged 29th day	(See notes below.)
Laparotomy, amputation of diverticulum; enterotomy and suture	C.E.	Discharged 56th day	(See notes below.)
Laparotomy, amputation of diverticulum, and removal of sub-peritoneal fibroid	$CHCl_3$	Discharged 24th day	Band running from apex of diverticulum to mesentery and incarcerating several feet of ileum.
Laparotomy and amputation of diverticulum	C.E.	Discharged 26th day	Diverticulum bound to mesentery by a fibrous band obstructing ileum.
Laparotomy and ileostomy	Gas and ether	Died 10th day	Diverticulum attached by fibro-fatty band to under surface of R. lobe of liver. Lower 3 ft. of ileum coiled and adherent. (See notes below.)
Laparotomy and amputation of diverticulum; radical cure of R. inguinal hernia	$CHCl_3$	Died 4th day	Undescended testis R. Several coils of ileum strangulated by diverticulum, the umbilical end of which was cystic. Bowels acted well after operation. (See notes below.)
Laparotomy and amputation of diverticulum	C.E.	Died 1st day	Diverticulum obstructing lower ileum. P.M.—No peritonitis. Lower ileum congested. Death due to shock and obstructive toxæmia.
Laparotomy, resection 4 ft. of ileum, and axial anastomosis	C.E.	Discharged 21st day	3 ft. of ileum gangrenous.
Laparotomy, enterotomy, and suture. Appendicostomy	$CHCl_3$	Died 16th day	Volvulus of pelvic colon. (See notes below.)
Laparotomy and resection 14 ft. of ileum with lateral ileo-transverse colostomy. Appendicectomy	Gas and ether	Died 2nd day	P.M.—Anastomosis sound. Local peritonitis. Considerable dilatation of stomach and œdema of lungs.
Laparotomy and resection 3 ft. of ileum. Drainage of proximal end and suture of cæcum	C.E.	Died 3rd day	Lowest 2 ft. of ileum twisted and gangrenous. No P.M.
Laparotomy and resection 6 ft. of ileum. Drainage of both ends by Paul's tubes	,,	Died 1st day	4 ft. of ileum gangrenous. P.M.—Lower lobes of both lungs partly collapsed and congested.
Laparotomy, enterolysis, and reduction	,,	Discharged 30th day	Coil of ileum 3 ft. from ileo-cæcal valve incarcerated in a peritoneal pouch; partly obstructed also by a band.

GROUP B.—*Non-maligna*

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse
395	M.	32	Internal hernia	2 days. Acute abdominal pain and epigastric tenderness. Slight pain 4 days	72
396	F.	54	Impacted gall-stone	2 days. Vomiting 14 days. Abdominal pain and jaundice 2 years previously	112
397	F.	52	Do.	1 week. Vomiting and constipation	136
398	M.	53	Simple stricture	6 days. Vomiting, etc. Strangulated inguinal hernia of 2 days' duration, reduced by taxis 9 months previously	88
399	M.	9	,,	12 hours. Following resection and anastomosis. (See Case 599 for previous history)	140
400	M.	65	,,	3 days. No cause could be discovered, as there was no history of any previous illness	64
401	M.	9	Granuloma of ileum	7 days. Vomiting and constipation. Small epigastric tumour palpable. Had been ill for 14 days. 2 previous attacks of vomiting without constipation 9 months and 6 months previously	124
402	M.	18	Do.	2 days. Radical cure of inguinal hernia 8 days previously. Attack began with pain, vomiting, and pyrexia	88
403	M.	53	Strangulation by mesentery	4 days. Great distension. No vomiting	64
404	M.	48	Enterospasm	24 hours. Constipation 3 days	108
405	M.	79	,,	4 days. Vomiting and constipation. Abdomen distended. Fæcal vomiting 1 day	84
406	F.	32	,,	4 days. Abdominal pain 7 days. L. ovary, both tubes, and appendix removed 5 years previously	96
407	M.	5	,,	2 days. Vomiting and constipation. Peristalsis visible. Rectum empty and ballooned	76
408	F.	18	,,	4 days. Pain, vomiting, and passage of mucus and blood	104

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and reduction	Gas and ether	Died 2nd day	Coil of ileum incarcerated in para-sigmoid pouch. P.M.—Congestion and inflammation of lower ileum and cæcum. Obsolete phthisis.
Laparotomy, enterotomy, and removal of stone; infusion	$CHCl_3$	Died 1st day	Gall-stone impacted 6 ft. above the ileo-cæcal valve. Died soon after operation. (See notes below.)
Laparotomy, enterotomy, and removal of stone	C.E.	Died 1st day	Gall-stone impacted 2 ft. above the ileo-cæcal valve. (See notes below.)
Laparotomy and lateral anastomosis	Hedonal	Discharged 29th day	(See notes below.)
Laparotomy and lateral anastomosis; appendicectomy	C.E.	Discharged 20th day	Piece of apple impacted at site of anastomosis.
Laparotomy and lateral anastomosis	,,	Died 2nd day	P.M.—No cause found. Microscopically, a simple fibrous stricture showing chronic inflammatory changes. Lungs congested. Obsolete phthisis.
Laparotomy, resection 4 in. of jejunum, and axial anastomosis	$CHCl_3$	Died 25th day	An elongated elevation growing into the lumen of the bowel from its mesenteric aspect, and ulcerated in two places. (See notes below.)
Laparotomy, resection 12 in. of ileum, and axial anastomosis	C.E.	Died 2nd day	Fungating granuloma arising all round the interior of the bowel and obliterating its lumen. (See notes below.)
Laparotomy and rearrangement of ileal coils	,,	Discharged 18th day	Coil of lower ileum obstructed by passing under long mesentery.
Laparotomy	Gas and ether	Discharged 17th day	Coil of ileum pale and contracted.
Laparotomy	?	Discharged 16th day	Purgatives given after operation. Bowels acted 7th day.
Laparotomy	C.E.	Discharged 29th day	Cæcum and pelvic colon adherent to uterus, but not obstructed; colon full of scybala. Ileum dark in some places, and tightly contracted in others. Purgatives given after operation with good result.
Laparotomy	,,	Discharged 14th day	Bowels eventually acted after administration of large doses of purgatives.
Laparotomy and appendicectomy	,,	Discharged 21st day	8 in. of ileum collapsed and discoloured; appendix normal. Readmitted a week later with a similar attack; pain in the L. iliac fossa, and a palpable tumour which suddenly disappeared.

ADDITIONAL NOTES.

(Group B.)

Case 320.—At operation free fluid was found in the peritoneal cavity, and the intestine was covered with white spots. One of the white spots was excised and examined and was reported to be non-tuberculous; the fluid was sterile. At the end of the first month after operation an abdominal abscess was drained and yielded pus containing *Staphylococcus aureus* and *B. coli*; another abscess drained at the end of the second month contained *B. coli* alone. A fæcal fistula appeared at the end of the fourth month and persisted till the end of the seventh. *B. coli* vaccine was employed. The Calmette test was negative.

Case 346.—The ileum was obstructed by omental bands adherent in the right iliac fossa; one of the coils had nearly ruptured and was almost devoid of peritoneum. After operation obstructive symptoms persisted intermittently, and became urgent on the sixteenth day; the abdomen was reopened, and lateral anastomosis effected between the afferent and efferent ileum, thus short-circuiting the whole obstructed region. After this, symptoms improved, but the abdomen became distended several times subsequently, and on each occasion a temporary fæcal fistula spontaneously brought relief. Ultimately, however, the wound healed, and the patient was discharged in a satisfactory condition.

Case 348.—As operation afforded no relief, ileostomy was performed on the second day, with excellent results. Ileo-colostomy was performed at the end of two months, and two weeks later the ileostomy opening was closed.

Case 350.—The ileum was obstructed by dense adhesions 1 in. above the ileo-cæcal valve, and their division resulted in the formation of numerous raw surfaces. The peritoneal cavity contained pints of blood-stained fluid, and the obstructed ileum was dark and shaggy. The patient was readmitted three months later with obstructive symptoms, but was relieved by enemata.

Case 353.—At operation there was early peritonitis, and the retro-peritoneal glands were large and prominent. A

coil of ileum was adherent to the mesentery in the neighbourhood of the glands and was acutely kinked. In separating adhesions a coil of ileum nearly perforated, and the doubtful area was invaginated. Dry sponging and drainage. Death took place twenty-one hours later, but there had been no vomiting nor any action of the bowels.

P.M.—There was a large retroperitoneal abscess due to the caseation of tuberculous mesenteric glands. The ileum and cæcum were involved in adhesions.

Case 354.—P.M.—The body was emaciated. There was no peritonitis; the ileum was hypertrophied, and was obstructed 8 in. above the ileo-cæcal valve. There were old pleural adhesions, the lungs were congested and œdematous and showed signs of obsolete phthisis. The heart was large and fatty, and the left ventricle was hypertrophied; the valves were competent, but showed atheromatous changes. The pericardium and aorta were healthy, though the latter showed some dilatation. The liver was fatty and the spleen soft; there was chronic nephritis.

Death was attributed to acute œdema of the lungs.

Case 355.—P.M.—Recent plastic peritonitis was found in the lower half of the abdomen, and coils of ileum were adherent to the pelvic organs. One loop of ileum was strangulated and black, the bowel above this point being considerably dilated. In the stomach was found an old healed ulcer.

Case 357.—P.M.—There was no peritonitis. The upper ileum was distended and hypertrophied, and the lower 7 in. collapsed. There were old pleural adhesions, and signs of obsolete phthisis; the lungs were congested and œdematous. The heart was small but healthy. The liver was fatty.

Case 360.—P.M.—Slight plastic peritonitis. Nearly the whole of the ileum was dilated, hypertrophied, and congested. The lungs were congested and œdematous, but the pleural sacs were healthy. The heart and pericardium were normal. The liver was fatty, and calculi were found in the gall-bladder and cystic duct. The spleen was slightly swollen; the kidneys and adrenals were normal. The thyroid was uniformly enlarged, and in structure resembled a parenchymatous goitre.

Case 361.—After operation distension persisted and the

bowels failed to act. The abdomen was opened on the second day, the ileum was incised, drained for a short time, and sutured, after which an injection of mag. sulph. was given into the lumen of the bowel. Later ileostomy was performed.

P.M.—Pleural adhesions were found on both sides, and the lungs were congested and œdematous. The heart was normal. The liver and kidneys were fatty. The spleen was small and firm. An inguinal hernial sac was present on both sides. Death was attributed to intestinal paralysis.

Case 362.—P.M.—There was no peritonitis. The ileum was obstructed by adhesions which were probably due to tuberculous mesenteric glands. There were old pleural adhesions and signs of obsolete phthisis. The lungs were congested and œdematous. The heart and pericardium were normal; the aorta was dilated and its walls were thickened. The liver was small, dark brown in colour, and greasy. The spleen was small and adherent.

Case 363.—P.M.—There was general peritonitis. Adhesions were due to tuberculous peritonitis and tuberculous mesenteric glands. A fibrous scar was found at the apex of the right lung. The trachea and bronchi contained fæcal matter.

Case 364.—P.M.—The ileum was gangrenous in its lower 2 ft.; six small ulcers were present in this part, and one had almost perforated. The liver was fatty and microscopically showed degeneration of its cells.

Case 366.—P.M.—The ileum had been obstructed 6 in. above the ileo-cæcal valve, and a coil 4 in. in length was gangrenous. There were no other lesions.

Case 367.—P.M.—There was incipient general peritonitis. The lowest coil of ileum, 4 in. in length, was deeply congested and had perforated. The mesenteric glands were calcified. The lungs were congested and œdematous. The other organs were healthy.

Case 370.—P.M.—The ileum was obstructed 2 ft. above the ileo-cæcal valve. There were no signs of recurrent carcinoma. Colostomy had been performed on a blind ascending colon, closed at the previous operation. There was local peritonitis, and there were also numerous old adhesions. Old pleural adhesions were found on the left side, and the lungs were congested and œdematous. The heart was soft and flabby, but otherwise normal. The liver

was slightly fatty, and the spleen was soft. The kidneys showed granular changes and cortical wasting.

Case 371.—The peritoneum contained turbid fluid, and it was suspected that perforation had taken place.

P.M.—There was general peritonitis due to the rupture of the obstructed ileum; there were also numerous dense old adhesions. The mesenteric glands were tuberculous. The viscera showed cloudy swelling.

Case 372.—P.M.—The line of pressure was found 3 in. above the ileo-cæcal valve, and at this point the ileum was nearly gangrenous. Hæmorrhage had taken place into the wall of the ileum throughout its lower half. There was incipient peritonitis.

Case 373.—At operation several omental bands were found. There had evidently been a recent attack of appendicitis, as a small collection of inspissated pus was still present in the cæcal region. The wound suppurated, and on the eighth day a fæcal fistula appeared; the temperature ranged from 100°–102° F. till death.

P.M.—The body was emaciated. There was diffuse loculated peritonitis, with much matting of the ileal coils. Pleural adhesions were present on both sides, and the lower lobes of the lungs were partly collapsed and partly bronchopneumonic. The liver, spleen, and kidneys showed cloudy swelling. The appendix did not appear to have been the seat of primary disease.

Case 374.—P.M.—The body was emaciated. General peritonitis was present, both anastomoses having given way. Adhesions were found in the upper abdomen, the right loin, and the pelvis, but there was nothing to account for them. Pleural adhesions were found on both sides, and the bronchial glands were enlarged and calcareous. The heart showed brown atrophy. The liver was wasted and greasy, and the spleen small and adherent.

Case 376.—P.M.—Numerous old peritoneal adhesions were present. The anastomosis was sound. The lungs were deeply congested, and the heart muscle was fatty. The liver, spleen, and kidneys were soft.

Case 378.—P.M.—There was no peritonitis. The lower 3 ft. of ileum were deeply congested, and a circular ulcer was found inside the bowel at the lower end of the con-

gested part. The lungs were congested, and signs of obsolete phthisis were present at their apices.

Case 379.—P.M.—No marked signs of peritonitis. The Fallopian tubes showed evidence of past inflammation. The lungs were congested and œdematous.

Case 382.—There was evidence of past appendicitis. The diverticulum was 3½ in. long, arose 2 ft. from the ileo-cæcal valve, and was adherent to the abdominal wall. The appendix was adherent behind the mesentery of the terminal ileum. Post-operative ileus was overcome with the greatest difficulty.

Case 383.—The wound suppurated and gaped and was subsequently resutured. At operation the diverticulum was found bound by recent adhesions to the right side of the pelvic brim near the root of the appendix. It was about 2½ in. long and constricted the ileum lightly enough to leave no mark when removed ; it was acutely inflamed and perforated at its tip ; fæces were present in its proximal half, but at its extremity lay a fish-bone just beneath the perforation. The patient was readmitted seven months later with an abdominal abscess, which required incision and drainage on three different occasions, and three months later the appendix was removed.

Case 386.—P.M.—There was pelvic peritonitis. The diverticulum arose 3 ft. from the ileo-cæcal valve and contained a lipoma at its apex. Six ulcers were found in the dilated ileum above the diverticulum, and one of these had perforated. Pleural adhesions were present, and signs of obsolete phthisis on both sides ; the lower lobe of the left lung showed recent broncho-pneumonia. The heart was fatty, but the valves and pericardium were normal. The liver and kidneys were fatty.

Case 387.—P.M.—There was local peritonitis. The stump of the diverticulum lay 40 in. above the ileo-cæcal valve. Three in. of ileum, 6 in. above the valve, were deeply congested. Old pleural adhesions were present, and acute lobar pneumonia on the right side.

Case 390.—No adhesions were found at operation, but the whole colon was enormously distended ; it was tapped in several places. After operation constipation persisted and the abdomen became distended. The appendicostomy

opening failed to perform the function of a safety valve, and the wound suppurated. Cellulitis of the abdominal wall required incision on the eighth day, and on the tenth, left iliac colostomy was performed, when local peritonitis was discovered.

P.M.—There was general peritonitis with recent formation of adhesions. The volvulus was situated at the commencement of the pelvic colon, and above this point the colon was greatly distended and inflamed. The mediastinal glands were caseous. Microscopically the mesentery showed acute inflammatory changes.

Case 396.—P.M.—The body was extremely fat. Two fistulæ were found between the gall-bladder and the first part of the duodenum; the larger admitted a thumb. The walls of the gall-bladder were thick, rigid, and black; the ducts were pervious. The right pleura was universally adherent. The heart was normal. The liver and kidneys were fatty.

Case 397.—P.M.—The body was very fat. A fistula was found between the gall-bladder and the first part of the duodenum. The lungs were congested and the myocardium fatty. The liver was large and fatty, the kidneys were soft, and the spleen was soft and congested.

Case 398.—Lateral anastomosis on the lines of Finney's operation for pyloric stenosis. Post-operative melæna and diarrhœa relieved by salol and charcoal biscuits. On the fifteenth day the temperature was high and the patient had several rigors; a local inflammatory swelling appeared in the abdomen, but subsided under treatment with hot air baths.

Case 401.—Operation was followed by broncho-pneumonia.

P.M.—The anastomosis lay 8 in. below the duodeno-jejunal flexure and was sound; a bleeding ulcer was found in the first part of the duodenum. The colon was freely movable and had a long mesentery everywhere except at the splenic flexure. There were no signs of tuberculosis. The right lung was broncho-pneumonic, and an empyema was found on that side.

Case 402.—P.M.—There was no peritonitis, but the mesenteric glands were soft and swollen. The anastomosis lay 53 in. below the duodeno-jejunal flexure. The liver, spleen, and kidneys showed cloudy swelling. Broncho-pneumonia was found on both sides.

GROUP C.—

Case.	Sex.	Age.	Situation of growth.	History and Clinical Notes	Pulse.
409	F.	47	Cæcum	6 months. Gradual onset	100
410	M.	73	,,	7 days	88
411	M.	69	,,	?	100
412	F.	61	,,	Pain and vomiting 3 months. Operation for ovarian cyst 3 years previously	96
413	M.	47	,,	2 days. Pain 6 weeks	84
414	F.	65	Transverse colon	4 days. No previous history	100
415	M.	38	,,	17 days. Abdominal pain, vomiting, and constipation	100
416	F.	62	,,	24 hours. Previous admission 3 months before with abscess of abdominal wall	108
417	F.	70	,,	5 days. Abdominal pain 3 months, and chronic constipation 6 months	120
418	M.	64	,,	7 days. Fæcal vomiting 4 days. Epigastric pain of recent origin	88
419	F.	71	,,	1 week. Rectal hæmorrhage 1 year	112
420	M.	65	,,	14 days	110
421	F.	67	,,	4 days	100
422	F.	57	,,	?	?
423	F.	70	,,	Gradual onset 1 month. Constipation 9 months	100
424	M.	60	,,	3 days. Gradual onset 3 weeks	128
425	F.	53	Splenic flexure	Extreme constipation 4 weeks. Abdominal pain 12 months	92
426	M.	58	,,	3 days. Chronic obstruction 3 months	64

Malignant Obstruction.

Treatment.	Anæsthetic.	Result.	Remarks.
Ileo-transverse anastomosis	$CHCl_3$	Discharged 21st day	—
Ileo-transverse anastomosis	C.E.	Discharged 24th day	At operation: large mass in cæcal region and disseminated growth. Temporary fæcal fistula. Readmitted 2 months later with enormous abdominal tumour; died. No P.M.
Ileostomy	$CHCl_3$	Died 14th day	At operation: growth had invaded lower ileum, and spread to pelvic wall. Digestion of skin followed. (See notes below.)
Ileo-sigmoidostomy	C.E.	Died 3rd day	A mass of carcinoma was found at the cæcal region, with secondary nodules in the omentum; the ileum was kinked. (See notes below.)
Ileo-sigmoidostomy	,,	Died 22nd day	(See notes below.)
Laparotomy and resection 5 in.; distal end closed; proximal end drained by Paul's tube	,	Discharged 39th day	A.B.C. serum injected at operation. Readmitted 6 weeks later; colostomy closed, and ileo-sigmoidostomy performed. Readmitted with acute obstruction 2 years later. (See Case 370.)
Ascending colostomy	Gas and ether	Died 2nd day	(See notes below.)
Ascending — transverse anastomosis	$CHCl_3$	Died 3rd day	(See notes below.)
Ileo-transverse anastomosis	,,	Died 2nd day	(See notes below.)
Cæcostomy	Local	Died 8th day	(See notes below.)
Transverse colostomy	C.E.	Died 6th day	Extreme cachexia. No P.M.
Transverse colostomy	,,	Died 2nd day	Death was due to toxæmia. P.M.—No secondary growths were found.
Ileostomy and infusion	,,	Died 9th day	Died very suddenly. (See notes below.)
Cæcostomy	,,	Died 1st day	(See notes below.)
Transverse colostomy	,,	Died 3rd day	Marked albuminuria. Died with symptoms of uræmia. (See notes below.)
Cæcostomy	,,	Died 2nd day	P.M.—Several polypi were found below the carcinoma. The lungs were congested and œdematous; pleural adhesions were present on the L. side.
Transverse colostomy	Gas and ether	Discharged 39th day	Resection of growth and lateral anastomosis on the 15th day; the growth had spread outside the bowel wall and had invaded the meso-colon. The fistula had almost healed on discharge.
Cæcostomy	C.E.	Discharged 80th day	(See notes below.)

GROUP C.—*Maligna*

Case.	Sex.	Age.	Situation of growth.	History and Clinical Notes.	Pulse
427	F.	71	Splenic flexure	4 days. Abdominal distension 2 weeks. Intermittent diarrhœa 10 years	84
428	F.	40	,,	Gradual onset 3 weeks. Malaise 5 months	108
429	M.	67	,,	3 days. Constipation 6 months	84
430	M.	59	,,	3 days. Chronic obstruction 3 months	64
431	F.	58	,,	6 days. Constipation several months	104
432	F.	60	,,	1 day. Gradual onset 1 month	136
433	M.	60	,,	7 days. Subacute symptoms 5 weeks	88
434	M.	42	,,	9 days	76
435	M.	65	Descending colon	1 week. First symptom 2 weeks before admission	100
436	M.	59	Sigmoid colon	5 days. Chronic obstruction several months	100
437	M.	59	,,	7 days. Passage of blood and mucus 7 months	84
438	M.	54	,,	6 days. A colostomy had been performed 2 years previously	80
439	M.	66	,,	3 weeks, gradual onset.	100
440	F.	26	,,	9 days' absolute constipation. Acute pain 2 days	80
441	M.	73	,,	10 days, gradual onset. Chronic obstruction 9 months	80
442	F.	30	,,	14 days	132
443	F.	49	,,	3 weeks, gradual onset	108
444	F.	81	,,	1 month absolute constipation. Pain and wasting 2 months	92
445	F.	50	,,	10 days. Subacute symptoms 2 weeks	140
446	F.	45	,,	4 days	136
447	F.	58	Sigmoid colon	?	80

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Transverse colostomy	$CHCl_3$	Discharged 3rd month	On the 51st day lateral anastomosis was performed between the ileum and the pelvic colon, the ileum being divided below the anastomosis.
Resection and transverse colostomy	C.E.	Discharged 38th day	About 1 ft. of colon was resected; the lower cut end was closed, and a Paul's tube tied into the upper. (See notes below.)
Sigmoid colostomy	$CHCl_3$	Died 2nd day	(See notes below.)
Transverse colostomy	C.E.	Died 7th day	(See notes below.)
Transverse colostomy	$CHCl_3$	Died 9th day	Fæcal vomiting occurred during operation and pneumonia followed. (See notes below.)
Transverse colostomy	,,	Died 11th day	Operation was followed by cellulitis of the abdominal wall. P.M.—Numerous peritoneal adhesions. The lungs and liver were congested, and the heart soft and flabby.
Transverse colostomy	C.E.	Died 1st day	No P.M.
Sigmoid colostomy	,,	Died 4th day	(See notes below.)
Transverse colostomy	,,	Recovered	(See notes below.)
Sigmoid colostomy	?	Discharged 32nd day	Small nodules of growth were present in the mesentery.
Sigmoid colostomy	Gas and ether	Discharged 21st day	The ileum was aspirated to relieve distension.
Ileo-sigmoidostomy	$CHCl_3$	Discharged 29th day	The ileum was found to be adherent to the pelvic growth. Aspiration of ileum.
Descending colostomy	C.E.	Discharged 32nd day	—
Sigmoid colostomy	Gas and ether	Discharged 66th day	On the 34th day the growth was removed together with the adjacent glands and the L. tube and ovary, which were adherent. The wound suppurated.
Sigmoid colostomy	$CHCl_3$	Discharged 17th day	—
Cæcostomy	C.E.	Discharged 3rd month	The cæcum was gangrenous, and the whole pelvis was filled with growth. On the 56th day a sigmoid colostomy was performed and a lateral anastomosis between the ileum and transverse colon.
Transverse colostomy	Gas and ether	Discharged 20th day	A mass was found in the pelvic colon, and there were secondary deposits.
Sigmoid colostomy	Local	Discharged 22nd day	—
Resection and sigmoid colostomy	C.E.	Discharged 48th day	(See notes below.)
Sigmoid colostomy	,,	Discharged 45th day	On the 29th day a length of pelvic colon containing the growth and the stoma was resected; axial anastomosis.
Transverse colostomy	Hedonal	Discharged 34th day	Laparotomy with a view to resection on the 27th day; secondary growths found on the peritoneum. Operation abandoned.

GROUP C.—*Malignant*

Case.	Sex.	Age.	Situation of growth.	History and Clinical Notes.	Pulse.
448	F.	52	Sigmoid colon	6 days. Large amount of blood and mucus passed. No previous history	100
449	F.	55	,,	3 days. Temporary transverse colostomy and subsequent ileo-colostomy had been performed 6 months previously	100
450	M.	67	,,	3 weeks. Abdominal pain, flatulence, etc.	104
451	F.	66	,,	1 week. Constipation 2 years	88
452	F.	63	,,	5 days. One attack of constipation and subsequent diarrhœa 12 months previously	104
453	F.	78	,,	11 days. Constipation 3 months	92
454	M.	65	,,	4 days. Chronic obstruction 2 months	112
455	M.	64	,,	2 days' acute pain. Vomiting 1 week	88
456	M.	54	,,	3 days. Constipation 10 days	92
457	F.	26	,,	6 days, gradual onset. No previous history	128
458	M.	62	,,	3 days. Symptoms exceedingly acute	108
459	M.	68	,,	4 days. Fæcal vomiting 1 day. No previous symptoms	100
460	M.	58	,,	12 days	100
461	F.	40	,,	14 days	108
462	F.	54	,,	2 weeks, gradual onset. Vomiting 2 days	104
463	M.	50	,,	5 days	100
464	F.	47	"Colon"	2 weeks, gradual onset. Pain and vomiting 3 weeks	128
465	M.	68	Rectum	1 week. Chronic obstruction 1 year	80
466	M.	64	,,	14 days' subacute obstruction. Gradual onset 4 months	84
467	M.	42	,,	1 week. Chronic obstruction 1 month	140
468	M.	64	,,	4 days	108
469	M.	43	,,	?	70
470	M.	57	,,	7 days	80

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Sigmoid colostomy	C.E.	Recovered	On the 36th day the patient had recovered completely; the growth was then resected and axial anastomosis performed; death 3 days later. P.M.—Peritonitis.
Transverse colostomy	Gas and ether	Died 12th day	(See notes below.)
Transverse colostomy	C.E.	Died 7th day	P.M.—No peritonitis. Growth found at top of iliac colon. A few secondary nodules present in the R. lobe of the liver. Confluent broncho-pneumonia on both sides.
Transverse colostomy	,,	Died 8th day	(See notes below.)
Sigmoid colostomy	,,	Died 7th day	(See notes below.)
Sigmoid colostomy	$CHCl_3$	Died 4th day	(See notes below.)
Cæcostomy	C.E.	Died 2nd day	Aspiration of ileum to relieve distension. (See notes below.)
Sigmoid colostomy	,,	Died 3rd day	The bowels acted satisfactorily through the stoma after operation. (See notes below.)
Transverse colostomy	$CHCl_3$	Died 5th day	P.M.—The growth lay at the ilio-pelvic junction. Both lungs were pneumonic, and the liver was fatty.
Ileo-sigmoidostomy	C.E.	Died 3rd day	The growth lay just below the pelvic brim. (See notes below.)
Sigmoid colostomy	,,	Died 5th day	(See notes below.)
Sigmoid colostomy	,,	Died 5th day	The operation gave no relief as the bowels did not act. (See notes below.)
Sigmoid colostomy	,,	Died 5th day	P.M.—General peritonitis. Secondary growths were present in the liver.
Sigmoid colostomy	,,	Died 3rd day	Extensive growth. (See notes below.)
Transverse colostomy	,,	Died 6th day	(See notes below.)
Transverse colostomy	,,	Died 5th day	(See notes below.)
Transverse colostomy	Gas and ether	Discharged 46th day	Great distension of ileum and transverse colon. Situation of growth not stated.
Sigmoid colostomy	C.E.	Discharged 38th day	—
Sigmoid colostomy	,,	Discharged 28th day	Operation was followed by an acute attack of gout.
Sigmoid colostomy	Spinal	Discharged 18th day	Admitted subsequently for dilatation of the stoma.
Sigmoid colostomy	C.E.	Discharged 3rd month	Laparotomy 1 month after admission with a view to removal of growth; operation abandoned.
Transverse colostomy	,,	Discharged 40th day	Continued pyrexia after operation till discharge from hospital.
Sigmoid colostomy	,,	Discharged 21st day	—

GROUP C.—*Malignan*

Case.	Sex.	Age.	Situation of growth.	History and Clinical Notes.	Pulse.
471	M.	61	Rectum	3 days. Subacute symptoms 6 weeks. Tender mass in R. iliac fossa. Enormous cæcum	64
472	F.	47	,,	1 week's acute symptoms. Absolute constipation 3 weeks	100
473	M.	58	,,	5 days' absolute constipation. Pain 10 days	84
474	M.	68	,,	4 days. Diarrhœa 10 days. No previous symptoms	128
475	M.	60	,,	?	?
476	F.	71	,,	4 days. Subacute symptoms 4 weeks	100
477	M.	67	,,	2 days. Abdominal pain 3 weeks	68
478	M.	53	,,	5 days' constipation and vomiting. 4 months' pain. 15 months' diarrhœa	104
479	F.	79	,,	6 days. First symptoms 9 months previously	124
480	M.	75	,,	2 days. Chronic obstruction 9 months	112
481	F.	58	Uterus	7 days. Chronic obstruction 2 years	88
482	F.	58	Vagina	3 weeks' pain and vomiting. Vaginal hysterectomy for carcinoma 5 years previously	116
483	F.	51	Pancreas	2 days. Constipation 3 months	130
484	M.	68	Prostate	4 months, gradual onset. Distension and vomiting. Œdema of L. leg	112
485	M.	54	Disseminated carcinoma	4 days. Intestinal colic 3 weeks. An abdominal abscess had been drained 5 months previously	98
486	F.	62	Do.	1 week. Vomiting 4 days. Melæna and constipation 12 months	100
487	F.	58	,,	5 days. Gradual onset 7 weeks	96
488	F.	32	,,	11 days	152
489	M.	33	,,	3 weeks, gradual onset. Colostomy and excision of carcinoma of rectum 6 months previously	92
490	F.	54	,,	5 days. Constipation 3 months	92

Obstruction—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Sigmoid colostomy, suture of perforation, and drainage	C.E.	Discharged 30th day	There were 2 small perforations in the cæcum, but scarcely any fæcal matter had escaped. Perforation probably occurred under the anæsthetic.
Sigmoid colostomy	Gas and ether	Discharged 31st day	—
Sigmoid colostomy	?	Recovered	Abdomino-perineal resection undertaken on the 18th day, after which the patient died of peritonitis on the 4th day. There were no secondary growths.
Transverse colostomy; drainage; infusion	C.E.	Died 2nd day	The peritoneal cavity contained extremely offensive fluid. (See notes below.)
Sigmoid colostomy	$CHCl_3$	Died 4th day	(See notes below.)
Sigmoid colostomy	,,	Died 3rd day	No P.M.
Sigmoid colostomy and appendicectomy	C.E.	Died 4th day	Aspiration of cæcum. Cæcum greatly distended and ileum collapsed. (See notes below.)
Sigmoid colostomy	,,	Died 3rd day	(See notes below.)
Transverse colostomy	,,	Died 26th day	(See notes below.)
Transverse colostomy	$CHCl_3$	Died 4th day	(See notes below.)
Sigmoid colostomy	C.E.	Discharged 23rd day	Rectum obstructed.
Ileo-ascending anastomosis	$CHCl_3$	Died 4th day	Ileum obstructed by adhesion to recurrent carcinoma at the apex of the vagina. (See notes below.)
Cæcostomy	,,	Died 1st day	Splenic flexure obstructed by growth which had spread from the tail of the pancreas. (See notes below.)
Sigmoid colostomy	C.E.	Died 3rd day	Rectum obstructed. The bowels acted after operation. (See notes below.)
Division of band, ileo-colostomy, and aspiration of ileum	$CHCl_3$	Discharged 20th day	A band of carcinomatous omentum extended from the abdominal wall in the R. iliac fossa to the L. external abdominal ring. A mass of growth was found on the ileum 12 in. from the ileo-cæcal valve.
Enterolysis, V-shaped enterectomy, axial anastomosis, and sigmoid colostomy	,,	Discharged 31st day	The ileum was adherent to a pelvic growth.
Cæcostomy	Gas and ether	Discharged 25th day	The cæcum ruptured accidentally during manipulation.
Sigmoid colostomy	C.E.	Discharged 23rd day	The pelvic colon was obstructed by growth secondary to carcinoma of the uterus.
Stoma enlarged	$CHCl_3$	Died 12th day	Ileostomy was performed on the 3rd day, as the symptoms had not been relieved. (See notes below.)
Ileo-sigmoidostomy	,,	Died 5th day	One growth was found in the cæcum, and others were situated in the pelvic colon. P.M.—General peritonitis.

ADDITIONAL NOTES.

(Group C.)

Case 411.—P.M.—A mass of growth was found at the ileo-cæcal junction, and projected into the cæcum; the ileum was greatly hypertrophied in its lowest 2 ft. The right lung was gangrenous, and on section showed an abscess surrounded by pneumonic consolidation. The liver was fatty. The kidneys showed chronic interstitial changes.

Case 412.—Fluid fæces were passed *per rectum* immediately after operation.

P.M.—The anastomosis was sound, and there was no peritonitis. Metastases were found in the glands, liver, and pleura.

Case 413.—At operation the cæcum and ileum were found involved in a carcinomatous mass, and the ileal coils were matted together. Secondary nodules were seen in the liver, ileum, and in other places. Death was apparently due to exhaustion.

P.M.—The anastomosis was sound, and no other lesions were revealed.

Case 415.—P.M.—The body was greatly emaciated. Two carcinomatous strictures were found in the transverse colon near each end, the bowel being dilated and hypertrophied above and between them, but collapsed below; interiorly the whole of the colon was studded with polypi. There were some old peritoneal adhesions, particularly round the spleen. The lungs were œdematous and emphysematous, and a single adhesion was found in the pericardial sac. The liver was fatty, the spleen pale, and the kidneys and adrenals were healthy.

Case 416.—P.M.—The body was emaciated. There was no peritonitis. A carcinoma of the transverse colon was found adherent to the pylorus and jejunum; there were no fistulæ, but traction diverticula were in process of formation. The anastomosis was sound, and there were no secondary growths. Pleural adhesions were found on the right side,

the lungs were congested and œdematous, and old tuberculous lesions were found at the apices. The liver and kidneys were fatty.

Case 417.—P.M.—The growth lay at the commencement of the transverse colon. The anastomotic opening lay 4 in. above the ileo-cæcal valve, and 3 in. below the growth, and was sound. There were no secondary growths. The heart was flabby, and the aorta showed advanced atheroma. The lungs were congested and the kidneys granular.

Case 418.—P.M.—The growth was situated at the middle of the transverse colon, and enlarged glands were present in the adjacent mesentery. Peri-duodenal adhesions had caused dilatation of the stomach to twice its natural size, and the first and second parts of the duodenum were also distended. Many secondary growths were found in the liver, and one on the anterior wall of the stomach. Old pleural adhesions were found on the left side, and signs of pneumonia were present at both bases, the upper lobes being congested and friable. The heart was normal. The spleen and kidneys showed cloudy swelling.

Case 421.—P.M.—There was no peritonitis. A ring carcinoma was found in the transverse colon. Old tuberculous lesions were found on the left side of the chest. The cerebral arteries were atheromatous, but there were no signs of embolism.

Case 422.—P.M.—There was a tight ring carcinoma of the transverse colon near the splenic flexure ; the ascending and transverse parts of the colon were greatly hypertrophied. Some blood-stained serum was found in the peritoneal cavity.

Case 423.—P.M.—There was general peritonitis; no secondary growths were found. Dense pleural adhesions were found on both sides, but chiefly on the right. The lungs were congested and œdematous, and both showed old fibroid changes at the apices. The heart and liver were fatty ; the kidneys appeared normal to the naked eye.

Case 426.—The growth was excised on the twenty-seventh day, and the continuity of the bowel restored by axial anastomosis. On the fifty-seventh day the cæcostomy opening was sutured. Retention of urine occurred on two occasions, but otherwise convalescence was uninterrupted.

Case 428.—The patient was admitted again four months later; the opening was closed and ileo-sigmoidostomy performed. Peritonitis ensued and proved fatal.

Case 429.—No growth was found at operation, but a sigmoidostomy was performed, owing to the dilated condition of the pelvic colon.

P.M.—The ileum and colon were enormously distended. The growth was found at the splenic flexure, and above this point the bowel was ulcerated for a distance of 10 in. There was no peritonitis. Secondary growths were present in the liver. The lungs were congested and œdematous, and the kidneys were large; the heart-muscle was fatty.

Case 430.—P.M.—Pleural adhesions were present on both sides. On the right side the lower lobe was pneumonic, and the upper lobes were œdematous. An old cavity was found at the left apex. The right side of the heart was hypertrophied. The liver was fatty, and the kidneys showed cloudy swelling.

Case 431.—P.M.—A ring carcinoma was found at the splenic flexure; there were no secondary growths. A recent acute pleurisy was present on both sides; all the lobes on the right side showed acute lobar pneumonia, while on the left side the upper lobe was œdematous and the lower congested. The liver, spleen, and kidneys showed cloudy swelling.

Case 434.—No growth was found at operation, but the pelvic colon was enormously dilated, and a Paul's tube was therefore tied into it.

P.M.—The colostomy had been placed below the growth. There was general peritonitis due to perforation of the colon above the growth. The lungs were congested and œdematous, and the heart-muscle was friable.

Case 435.—The patient made a complete recovery, so on the twenty-first day it was decided to remove the growth. Five in. of descending colon were resected, the ends were closed, and lateral anastomosis was performed between the transverse colon and the pelvic colon; after this operation the patient died of peritonitis on the seventh day.

P.M.—There was general peritonitis. Apical adhesions

and signs of obsolete phthisis were found on both sides. The spleen was adherent.

Case 445.—The growth was resected, and the cut ends were implanted in the wound. On the thirteenth day the abdomen was opened again; the ileum was found adherent to the scar, was torn in two places and sutured. The cut ends of the colon were separated, and sutured together axially. A temporary fæcal fistula ensued.

Case 449.—P.M.—There was general peritonitis. The anastomotic opening was patent, and the exact site of obstruction was not clear. There were no secondary growths. The heart was soft, and signs of obsolete phthisis were present at the apices. The spleen was large and soft, the liver fatty, and the pancreas swollen.

Case 451.—P.M.—There was generalised peritonitis which had spread from the region of the colostomy. There were no secondary growths; the bowel above the growth was greatly hypertrophied. In the gall-bladder was found a single calculus. The lungs showed senile emphysema and an old tuberculous lesion at the left apex.

Case 452.—P.M.—The body was emaciated. There were no obvious signs of peritonitis, though fæcal material had been extravasated from a rent in the descending colon; this portion of the bowel was acutely inflamed, and the mucous membrane was gangrenous. The remainder of the colon was healthy and full of fæces; the growth lay 7 in. above the anus. The lungs were congested, and the heart was thin and fatty. The liver was fatty and the spleen soft. There were no secondary growths.

Case 453.—P.M.—The growth was found at the ilio-pelvic junction. The colon was dilated, but not ulcerated, and there was no peritonitis; there were no secondary growths. The lungs were congested. The heart was hypertrophied, chiefly on its left side; the valves were healthy, with the exception of the anterior mitral cusp, which showed some atheromatous patches. The aorta was thick, dilated, and scarred. The liver was small and fatty, and the spleen pale and shrunken. Each kidney showed two or three cysts about 3 in. in diameter; these contained clear fluid, and were probably congenital.

Case 454.—P.M.—The growth was found 6 in. from the anus, and below this point were several pedunculated polypi. There was no peritonitis and there were no secondary growths. The heart was normal, but the lungs were congested and showed apical adhesions. The liver was partly decomposed, the spleen enlarged, and the kidneys were greasy.

Case 455.—P.M.—The cæcum and colon were enormously distended. The lungs were normal. The heart was dilated and hypertrophied. The liver was fatty, the spleen soft, and the kidneys were congested.

Case 457.—P.M.—The growth was 2 in. long, and would scarcely allow the passage of a probe; above this point the colon was greatly hypertrophied and distended. The anastomosis was sound. Secondary growths were present in the liver and in the lumbar glands. The lungs were congested, and old adhesions were found at the left base. There were no other lesions.

Case 458.—P.M.—The growth was found at the pelvic brim. The lower lobe of the left lung was pneumonic, and the adjacent pleura was covered with a patchy fibrinous exudate. Old adhesions were present at the left apex, and signs of obsolete phthisis on both sides. The myocardium was very friable. The liver was large and contained secondary growths.

Case 459.—P.M.—A large ulcerating growth was found in the pelvic colon. Peritoneal metastases were discovered. Local peritonitis was present round the wound. There were no other lesions.

Case 461.—P.M.—The body was emaciated. The growth was adherent to the ovaries; the ovaries were cystic. The lower lobes of the lungs were congested and œdematous, and the upper lobes dry and wasted. The heart showed hypertrophy of the left ventricle. There was slight peritonitis.

Case 462.—P.M.—The intestines were enormously distended, but there was no peritonitis, nor were there any secondary growths. The lungs were congested and œdematous and showed moderate emphysema. The liver was large and fatty, and the kidneys showed cloudy swelling.

Case 463.—P.M.—There was general peritonitis, the bowel

having perforated at the site of the growth. The spleen was large and soft, and the kidneys showed cloudy swelling.

Case 474.—P.M.—There was general peritonitis. The growth lay 4 in. from the anus. The gall-bladder contained a calculus, its walls were greatly thickened, yellow, and wrinkled.

Case 475.—P.M.—There was no peritonitis. The growth lay 2 in. from the anus and scarcely allowed the passage of a probe; the colon was hypertrophied and distended with fæces. The lower lobes of both lungs were congested. The heart was dilated and hypertrophied. The aorta showed marked atheroma, and its valves were thickened.

Case 477.—P.M.—There was general suppurative peritonitis which had spread from the region of the wound. Secondary growths were found in the liver and in the hollow of the sacrum. The left pleura was densely adherent, the right lung showed emphysema, and the heart was hypertrophied. The kidneys showed chronic interstitial changes.

Case 478.—P.M.—The growth was 3 in. in length and infiltrated the surrounding tissues; there were no secondary growths. The intestines were greatly distended. The lungs were congested. There were no other lesions.

Case 479.—P.M.—The growth lay at the pelvi-rectal junction, and a few enlarged glands were present in the adjacent pelvic mesentery. There were no secondary growths. The lungs were congested and œdematous. The heart was soft, and the aorta dilated and atheromatous. The renal capsules were adherent; a cyst was present in the right kidney.

Case 480.—P.M.—The growth had not spread beyond the bowel wall, and there were no enlarged glands or any secondary growths. The colon was ulcerated above the point of obstruction. The lungs were congested, and the aorta was dilated and atheromatous. The liver was pale, the spleen adherent, and the gall-bladder contained calculi.

Case 482.—P.M.—At the apex of the vagina was found a carcinomatous nodule to which the ileum was adherent; the obstructed point lay near the ileo-cæcal valve. The anastomosis was sound. There were old pleural adhesions.

The liver was fatty, the spleen swollen, and the kidneys showed chronic interstitial changes.

Case 483.—P.M.—The pancreatic growth had contracted firm adhesions to the colon, stomach, spleen, and left kidney, though it did not appear to be infiltrating any of these organs. Calculi were found in the gall-bladder. The spleen contained cysts, and the kidneys showed interstitial fibrosis.

Case 484.—P.M.—The body was emaciated. The prostatic growth did not cause any urethral obstruction; there were no secondary growths. The left iliac vein was compressed. The lungs were emphysematous, and the myocardium was soft. There were no other lesions. The growth was a spheroidal-celled carcinoma.

Case 489.—P.M.—The body was emaciated. There was no peritonitis. The ileum was adherent in several places to the pelvic growth; the ileostomy opening lay below the highest of these adhesions and above the others. The peritoneal cavity was full of disseminated growth. There were old pleural adhesions, and the lungs were congested and emphysematous. The pericardium was normal, but the left ventricle showed hypertrophy. The liver was fatty; the spleen was soft.

GROUP D.—

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
491	M.	$\frac{10}{12}$	Entero-colic	?	100
492	F.	$\frac{7}{12}$	,,	12 hours	120
493	M.	$\frac{5}{12}$	,,	16 hours	140
494	M	$1\frac{4}{12}$	,,	6 hours	128
495	F.	$1\frac{1}{12}$	,,	10 hours	120
496	F.	$\frac{8}{12}$	,,	15 hours	120
497	M.	$\frac{7}{12}$	,,	2 days	120
498	F.	$\frac{9}{12}$	,,	8 hours	110
499	M.	$\frac{7}{12}$	,,	24 hours	144
500	M.	3	,,	24 hours	160
501	M.	$\frac{2}{12}$	,,	2 days	152
502	M.	33	,	(?) 6 days. Abdominal pain and vomiting; constipation followed by diarrhœa; no blood passed. Previous attacks at 22 and at 24	76
503	M.	$\frac{4}{12}$	,,	2 hours	152
504	F.	8	,,	(?) 3 days. Pain, vomiting, and tenesmus; no blood passed	107
505	M.	$\frac{4}{12}$	,,	7 hours	140
506	M.	$\frac{5}{12}$	,,	8 hours	140
507	M.	$\frac{6}{12}$	,,	6 hours	120
508	F.	$\frac{6}{12}$	,,	12 hours	120
509	F.	$\frac{8}{12}$	,,	24 hours	96
510	F.	$\frac{7}{12}$	,,	8 hours. Diarrhœa 3 days previously	126
511	M.	$\frac{5}{12}$	,,	8 hours	140
512	M.	2	,,	11 hours	128
513	M.	$\frac{8}{12}$	,,	30 hours	152
514	F.	$\frac{4}{12}$	,,	2 days	108
515	M.	$\frac{7}{12}$	,,	3 days	116

Intussusception.

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and reduction	C.E.	Discharged 15th day	—
Laparotomy and reduction; appendicectomy	,,	Discharged 17th day	—
Laparotomy and reduction	$CHCl_3$	Discharged 25th day	Stitches burst on 8th day; wound re-sutured.
Do.	,,	Discharged 9th day	Wound suppurated.
,,	,,	Discharged 20th day	—
,,	C.E.	Discharged 18th day	—
,,	$CHCl_3$	Discharged 26th day	—
,,	,,	Discharged 16th day	—
,,	,,	Discharged 25th day	Marked pulmonary collapse after operation.
Laparotomy	,,	Discharged 19th day	Reduction took place spontaneously.
Laparotomy and reduction	,,	Discharged 17th day	—
Laparotomy and reduction; appendicectomy; amputation of caput cæci	,,	Discharged 17th day	—
Laparotomy and reduction	C.E.	Discharged 13th day	—
Do.	$CHCl_3$	Discharged 17th day	—
,,	,,	Discharged 36th day	Marked pulmonary collapse after operation.
,,	,,	Discharged 20th day	—
,,	,,	Discharged 20th day	—
Laparotomy and reduction; appendicectomy	,,	Discharged 21st day	—
Laparotomy and reduction	C.E.	Discharged 15th day	Cæcum sutured to anterior abdominal wall, as the cæcum and ascending colon had a very long mesentery.
Do.	,,	Discharged 18th day	—
,,	,,	Discharged 25th day	Stitches burst on 6th day; wound re-sutured.
,,	$CHCl_3$	Discharged 16th day	—
Laparotomy and reduction; appendicectomy	,,	Discharged 17th day	—
Laparotomy and reduction	,,	Discharged 30th day	Wound suppurated.
Do.	C.E.	Discharged 19th day	Slight bronchitis after operation. Wound suppurated.

GROUP D.—

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
516	M.	3	Entero-colic	3 hours	120
517	M.	$\frac{8}{12}$	,,	36 hours	140
518	F.	$\frac{5}{12}$	,,	24 hours	136
519	M.	$\frac{8}{12}$	,,	36 hours	168
520	F.	3	,,	4 hours; passage of threadworms during previous 2 months. Previous operation for intussusception at age of 8 months	140
521	F.	3	,,	Case 520 re-admitted 3 months later. 2½ hours. Had passed threadworms on 8 occasions since previous admission.	120
522	F.	$\frac{6}{12}$	,,	23 hours	160
523	F.	$\frac{5}{12}$	,,	24 hours	136
524	F.	$\frac{3}{12}$	,,	24 hours	120
525	F.	$\frac{8}{12}$	,,	18 hours	120
526	M.	$\frac{11}{12}$	,,	24 hours	120
527	F.	4	,,	2 days	104
528	M.	$1\frac{2}{12}$	,,	14 hours	144
529	M.	$\frac{5}{12}$	,,	33 hours	160
530	F.	$\frac{4}{12}$	,,	24 hours	160
531	M.	$\frac{6}{12}$	,,	24 hours	180
532	M.	3	,,	10 hours	124
533	F.	$\frac{4}{12}$	,,	3 days' diarrhœa; vomiting 1 day	120
534	F.	$\frac{11}{12}$	,,	24 hours	128
535	F.	$1\frac{4}{12}$	,,	21 hours	132
536	M.	$\frac{5}{12}$	,,	12 hours	124
537	M.	$\frac{4}{12}$	,,	15 hours	112
538	F.	8	,,	30 hours	100
539	M.	$\frac{4}{12}$	,,	4 hours. Diarrhœa 2 days	140
540	M.	$\frac{7}{12}$	,,	24 hours	160
541	M.	3	,,	24 hours	112
542	F.	$\frac{10}{12}$	,,	6 hours	132
543	M.	$\frac{5}{12}$	,,	12 hours	100

Intussusception—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and reduction	$CHCl_3$	Discharged 21st day	—
Do.	,,	Discharged 16th day	Peritoneal covering of colon was torn and sutured.
,,	,,	Discharged 21st day	Wound suppurated.
,,	,,	Discharged 12th day	—
,,	,,	Discharged 23rd day	12 days after operation had pain, vomiting, and passage of blood *per rectum*, but recovered. (See Case 521.)
,,	C.E.	Discharged 15th day	Re-admitted 2 years later with passage of blood and mucus. Threadworms were found in the stools.
,,	,,	Discharged 18th day	—
,,	Spinal	Discharged 15th day	—
,,	C.E.	Discharged 16th day	Wound suppurated.
,,	Spinal	Discharged 13th day	—
,,	C.E.	Discharged 20th day	—
,,	,,	Discharged 18th day	—
Laparotomy	,,	Discharged 13th day	Reduction took place spontaneously.
Laparotomy and reduction	,,	Discharged 22nd day	Severe shock; patient revived with the greatest difficulty.
Do.	$CHCl_3$	Discharged 13th day	—
,,	C.E.	Discharged 16th day	The cæcum was sutured to the abdominal wall. A ventral hernia formed subsequently.
Laparotomy and reduction; appendicectomy	,,	Discharged 15th day	Wound suppurated.
Laparotomy and reduction	Spinal	Discharged 15th day	Re-admitted 14 days after discharge with cellulitis of the abdominal wall.
Do.	$CHCl_3$	Discharged 15th day	—
,,	C.E.	Discharged 17th day	—
,,	,,	Discharged 4th day	—
,,	,,	Discharged 20th day	—
,,	,,	Discharged 14th day	Re-admitted a month later. (See Case 596.)
,,	?	Discharged 15th day	—
,,	C.E.	Discharged 13th day	—
,,	,,	Discharged 13th day	—
,,	,,	Discharged 11th day	A brother of the patient had an intussusception at the age of 8 months.
Laparotomy and reduction	C.E.	Discharged 10th day	—

GROUP D.—

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
544	M.	$\frac{5}{12}$	Entero-colic	8 hours	168
545	M.	$\frac{6}{12}$	,,	4 hours	108
546	F.	$\frac{6}{12}$	,,	18 hours	148
547	M.	$\frac{4}{12}$	,,	6 hours	140
548	M.	$3\frac{8}{12}$	,,	9 days, gradual onset; abdominal pain, vomiting, and palpable tumour	128
549	M.	$\frac{7}{12}$	,,	24 hours	168
550	M.	1	,,	12 hours	144
551	M.	$\frac{10}{12}$	,,	30 hours	136
552	M.	2	,,	4 hours	84
553	F.	$\frac{2}{12}$	,,	12 hours	128
554	F.	$1\frac{7}{12}$	,,	12 hours	120
555	F.	$4\frac{6}{12}$	,,	12 hours	96
556	M.	2	,,	24 hours	120
557	M.	4	,,	2 days' illness. Vomiting 12 hours	140
558	M.	2	,,	12 hours. Abdominal pain 8 days	132
559	F.	$\frac{5}{12}$	,,	15 hours	164
560	M.	5	,,	24 hours	92
561	M.	5	,,	Case 560 re-admitted a few days after discharge. 24 hours' passage of blood and mucus. Abdominal pain 4 days	100
562	M.	$\frac{5}{12}$	,,	2 days	?
563	F.	$\frac{6}{12}$	,,	16 hours	120
564	M.	6	,,	24 hours	?
565	M.	$\frac{9}{12}$	,,	3 days' passage of blood and mucus. Diarrhœa 4 days	136
566	F.	$\frac{10}{12}$	,,	3 days' passage of blood and mucus. Abdominal pain 1 day. Diarrhœa and vomiting 4 days	?
567	F.	$\frac{10}{12}$	,,	? 24 hours. Diarrhœa and vomiting 5 days	135
568	M.	$\frac{6}{12}$	,,	24 hours	168

Intussusception—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and reduction	C.E.	Discharged 14th day	Wound suppurated. Died of broncho-pneumonia 3 weeks later.
Do.	,,	Discharged 10th day	—
,,	,,	Discharged 9th day	—
Laparotomy and reduction; appendicectomy	,,	Discharged 9th day	—
Laparotomy and reduction	,,	Discharged 15th day	—
Do.	,,	Discharged 26th day	Developed measles after operation.
Laparotomy	$CHCl_3$	Discharged 57th day	Wound suppurated. Marked bronchitis after operation. Reduction took place spontaneously.
Laparotomy and reduction	,,	Discharged 16th day	—
Laparotomy and reduction; appendicectomy	C.E.	Discharged 16th day	—
Laparotomy and reduction	$CHCl_3$	Discharged 13th day	—
Do.	,,	Discharged 12th day	Re-admitted a year later with recurrence; operation and recovery.
,,	C.E.	Discharged 29th day	Slight bronchitis after operation.
,,	,,	Discharged 16th day	—
,,	,,	Discharged 11th day	—
,,	,,	Discharged 14th day	Laparotomy also revealed tuberculous peritonitis.
,,	$CHCl_3$	Discharged 24th day	—
Laparotomy and reduction; appendicectomy	C.E.	Discharged 9th day	The intussusception had been started by invagination of the appendix. (See Case 561.)
Laparotomy and resection	,,	Discharged 19th day	(See notes below.)
Laparotomy and reduction; appendicectomy	,,	Died 1st day	Severe shock. P.M.—Great congestion of bowel wall, congestion of lungs, and one small focus of broncho-pneumonia.
Laparotomy	$CHCl_3$	Died 13th day	Reduction took place spontaneously. Broncho-pneumonia after operation. (See notes below.)
Laparotomy and reduction	C.E.	Died 1st day	P.M.—The lowest 3 in. of the ileum, the cæcum, and the ascending colon were congested.
Do.	?	Died 1st day	The cæcum was torn and sutured. P.M.—Fæcal extravasation through a rent in the transverse colon.
,,	C.E.	Died 1st day	Pulse too weak and rapid to be counted. P.M.—Cæcum dark red and necrotic.
,,	$CHCl_3$	Died 3rd day	P.M.—The mucosa at the site of invagination was deeply congested.
Laparotomy and reduction; appendicectomy	,,	Died 1st day	Ascending colon torn and sutured. P.M.—The cæcum was abnormally mobile so that the ileum lay partly to its outer side.

GROUP D.—

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
569	M.	$\frac{5}{12}$	Entero-colic	4 days	52
570	M.	$\frac{1}{12}$	,,	3 days	176
571	F.	$\frac{5}{12}$	,,	36 hours	140
572	M.	$\frac{10}{12}$	,,	30 hours	108
573	F.	4	,,	1 day, vomiting and melæna. Diarrhœa 3 days	140
574	F.	$\frac{8}{12}$	,,	36 hours	152
575	M.	$\frac{3}{12}$	,,	12 hours	192
576	M.	$\frac{1}{12}$	,,	3 days	136
577	M.	$\frac{8}{12}$	,,	24 hours	172
578	M.	$\frac{10}{12}$	,,	48 hours	160
579	F.	$\frac{0}{12}$	,,	3 hours	120
580	M.	2	,,	24 hours	120
581	M.	$\frac{3}{12}$	,,	20 hours	160
582	F.	$\frac{7}{12}$	,,	Laparotomy and reduction of intussusception 2 months previously, when 4 in. of bowel protruded from the anus. 36 hours	136
583	M.	1	,,	24 hours	136
584	M.	$\frac{7}{12}$	,,	4 hours	160
585	F.	$\frac{6}{12}$	,,	32 hours	120
586	F.	$\frac{9}{12}$	,,	14 days' passage of blood and mucus, diarrhœa, and abdominal pain. Tumour felt 14 days before admission	164
587	M.	$\frac{5}{12}$	,,	20 hours	120
588	M.	$\frac{11}{12}$	,,	5 days	120
589	M.	$\frac{6}{12}$	,,	24 hours	?
590	F.	$\frac{9}{12}$	,,	12 hours	120

Intussusception—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and resection	C.E.	Died 1st day	(See notes below.)
Do.	,,	Died 1st day	(See notes below.)
Laparotomy and partial reduction	$CHCl_3$	Died 1st day	(See notes below.)
Laparotomy and reduction	Spinal	Died 3rd day	P.M.—Lowest 10 in. of ileum deeply congested. No peritonitis. Pulmonary congestion.
Do.	C.E.	Died 1st day	P.M.—The lowest foot of the ileum was deeply congested. There was a caseous mesenteric gland.
Laparotomy and resection	,,	Died 2nd day	4 in. of ileum and cæcum were resected, with axial anastomosis. P.M.—Local peritonitis.
Laparotomy and reduction	$CHCl_3$	Died 8th day	(See notes below.)
Do.	,,	Died 2nd day	No P.M.
Laparotomy and resection	Spinal	Died 3rd day	Partial reduction; resection 6 in. of ileum, cæcum, and ascending colon. P.M.—Pulmonary collapse.
Laparotomy and reduction	$CHCl_3$	Died 2nd day	P.M.—Abnormally mobile and congested cæcum and ascending colon.
Do.	C.E.	Died 18th day	Sub-hepatic abscess drained on the 16th day. P.M.—General peritonitis and cloudy swelling of viscera.
,,	$CHCl_3$	Died 1st day	(See notes below.)
,,	C.E.	Died 1st day	P.M.—Diffuse muco-purulent bronchitis and local peritonitis.
,,	Spinal	Died 1st day	Death took place during operation. No P.M.
,,	C.E.	Died 2nd day	P.M.—The lowest foot of the ileum was almost gangrenous. The liver was fatty.
,,	$CHCl_2$	Died 17th day	Diarrhœa and vomiting after operation. (See notes below.)
Laparotomy and resection	C.E.	Died 1st day	Partial reduction, and resection of 2 in. of ileum with axial anastomosis. Infusion. No P.M.
Do.	,,	Died 2nd day	Resection of tumour 6 in. long. Paul's tubes tied into cut ends. P.M.—General peritonitis and a few light adhesions. The lower ileum, cæcum, and ascending colon had been removed.
Laparotomy and reduction; appendicectomy	,,	Died 3rd day	Died of obstruction. P.M.—Plastic peritonitis, causing light matting of the intestines and obstruction. Mesenteric glands soft and swollen. Slight pulmonary congestion.
Laparotomy and reduction	,,	Died 2nd day	P.M.—No peritonitis, but gangrene at site of invagination.
Do.	Spinal	Died 1st day	P.M.—General peritonitis. The lungs showed a few patches of collapse.
,,	C.E.	Died 15th day	(See notes below.)

GROUP D.

Case.	Sex.	Age.	Variety.	History and Clinical Notes.	Pulse.
591	M.	$\frac{3}{12}$	Entero-colic	12 hours	128
592	M.	2	,,	4 days	120
593	F.	$\frac{8}{12}$	Enteric	24 hours. 4 months previously passage of blood and mucus *per rectum* with abdominal pain lasting 4 days	140
594	M.	3	,,	48 hours	132
595	M.	5	,,	Abdominal pain 8 days. Constipation and melæna 2 days. Joint pains 5 days —"Henoch's purpura."	124
596	F.	8	,,	Laparotomy and reduction of entero-colic intussusception 1 month previously. (See Case 538.) 36 hours	112
597	M.	2	,,	12 hours	140
598	F.	8	,,	3 days' acute abdominal pain and vomiting. Tumour in R. iliac fossa and dulness in flanks. Sub-acute pain 10 days.	116
599	M.	9	,,	12 hours	96
600	M.	$1\frac{8}{12}$	,,	2 days	124
601	F.	58	,,	2 days. Abdominal pain with alternating diarrhœa and constipation 18 months.	104
602	M.	60	,,	3 days	88
603	M.	$4\frac{7}{12}$	,,	24 hours	136
604	M.	2	,,	4 days	160
605	F.	2	Colic	24 hours	144
606	F.	9	,,	12 hours. Sudden onset after lifting a child. Abdominal pain and malaise 14 days	60
607	F.	$\frac{9}{12}$	,,	5 hours	116
608	F.	4	,,	13 hours. Abdominal pain 3 days. Whooping-cough 14 days	164
609	M.	$\frac{5}{12}$	,,	12 hours	140
610	F.	$\frac{6}{12}$	Not stated	6 hours. Mass felt at splenic flexure	156
611	F.	$\frac{5}{12}$	,,	?	?
612	M.	$1\frac{4}{12}$	,,	14 hours	132
613	F.	$\frac{5}{12}$	,,	6 hours	100
614	M.	$1\frac{5}{12}$	,,	12 hours	140
615	M.	$\frac{10}{12}$	,,	2 days' passage of mucus and blood. Abdominal pain 3 days. Bowel protruded from the anus	140

Intussusception—(continued).

Treatment.	Anæsthetic.	Result.	Remarks.
Laparotomy and reduction	C.E.	Died 3rd day	P.M.—Both lower lobes were collapsed, but there were no signs of broncho-pneumonia. No peritonitis.
Do.	$CHCl_3$	Died 4th day	(See notes below.)
,,	,,	Discharged 15th day	(See notes below.)
,,	,,	Discharged 16th day	Large mesenteric glands.
Laparotomy and resection	,,	Discharged 37th day	2½ ft. of ileum resected, with axial anastomosis. Wound suppurated. Bronchitis on 22nd day.
Laparotomy, partial reduction, and lateral anastomosis	C.E.	Discharged 28th day	Apart from the affected bowel, there were two other thickened patches in the ileum. (See notes below.)
Laparotomy and reduction	$CHCl_3$	Discharged 6th day	Scarlet fever after operation.
Laparotomy, resection, and lateral anastomosis	C.E.	Discharged 18th day	(See notes below.)
Laparotomy, resection, and axial anastomosis	,,	Discharged 23rd day	12 in. of ileum gangrenous; 18 in. resected. (See notes below.)
Do.	,,	Died 1st day	5 in. of ileum resected. Infusion. P.M.—Tuberculous mediastinal glands.
,,	$CHCl_3$	Died 2nd day	No P.M.
,,	C.E.	Died 3rd day	P.M.—Recent adhesions obstructing the ileum. Early local peritonitis.
Laparotomy and reduction	?	Died 2nd day	(See notes below.)
Laparotomy and resection	C.E.	Died 8th day	Paul's tubes tied into the cut ends. P.M.—Local peritonitis.
Laparotomy and reduction	$CHCl_3$	Discharged 31st day	Transverse colon. Wound burst open on 8th day; re-sutured.
Do.	C.E.	Discharged 25th day	Transverse colon.
,,	$CHCl_3$	Discharged 18th day	Transverse colon. Partial reduction from without.
,,	,,	Discharged 21st day	Transverse colon (probably). Bronchitis after operation.
,,	C.E.	Discharged 14th day	—
Laparotomy	$CHCl_3$	Discharged 13th day	Reduction had taken place under water-pressure
Laparotomy and reduction	C.E.	Discharged 16th day	—
Do.	$CHCl_3$	Discharged 25th day	The apex reached as far as the L. iliac fossa.
,,	Spinal	Discharged 10th day	—
,,	C.E.	Discharged 10th day	—
,,	$CHCl_3$	Died 2nd day	Attempted reduction by water-pressure failed.

ADDITIONAL NOTES.

(Group D.)

Case 561.—On this occasion also the site of origin of the appendix formed the apex of the intussusception. The invaginated stump had swollen to the size of a cherry, and could easily be felt on palpation of the transverse colon. Reduction was attempted, but without success. The intussusception was resected, including 3 in. of ileum and 3 in. of cæcum and ascending colon, and the cut ends were sutured together axially. Recovery was uneventful.

Case 563.—P.M.—The wound had healed. There was no peritonitis. The lower 2 in. of the ileum and the cæcum were discoloured. The lungs showed emphysema anteriorly and collapse posteriorly; at the apex of the L. lower lobe there was a patch of broncho-pneumonia.

Case 569.—The intussusception had reached the sigmoid colon and 6 in. of bowel were gangrenous. The condition was poor, the pulse was very weak, and the abdomen distended. About a foot of ileum and colon was resected, Paul's tubes being tied into the cut ends.

P.M.—No other lesions were found.

Case 570.—Reduction was attempted, but was only partly successful. The cæcum was gangrenous, and was accordingly resected together with portions of the adjacent ileum and colon; Paul's tubes were tied into the cut ends.

P.M.—Part of the transverse colon was gangrenous, and was tightly constricted by a loop of pelvic colon twisted over it.

Case 571.—Reduction could not be completed, and the colon ruptured, showing the cæcum within it; this gangrenous portion was left outside the abdomen.

P.M.—No other noteworthy lesions.

Case 575.—After operation the child contracted measles, and this was succeeded by broncho-pneumonia. On the seventh day a fæcal fistula formed.

P.M.—There was peritonitis in the R. iliac fossa. A small Meckel's diverticulum was found, a quarter of an inch in length. The R. lung showed broncho-pneumonia.

Case 580.—This child had been operated upon for imperforate anus shortly after birth, and had a recto-urethral fistula.

P.M.—Mobile cæcum and congestion of the parts concerned in the intussusception. There was also an undescended testis, and a congenital abnormality of the R. kidney.

Case 584.—P.M.—The body was emaciated. The lymphoid follicles of the gut were swollen, but the mesenteric glands were not enlarged. The liver and kidneys were pale and yellow.

Case 590.—Acute intestinal obstruction developed on the fourteenth day. Laparotomy revealed local plastic peritonitis with slight matting of the ileal coils in the ileo-cæcal region. Adhesions were separated, but the child died on the following day, the temperature rising to 108° F. before death.

P.M.—Local peritonitis.

Case 592.—The temperature rose steadily till death.

P.M.—There was no peritonitis, but the liver was fatty. The lungs were broncho-pneumonic in some parts, while in others they showed alternating patches of emphysema and collapse.

Case 593.—At operation, besides the enteric intussusception, there was also found great thickening of the caput cæci and lower end of the ileum, with congestion of the appendix, probably due to spontaneous reduction of an entero-colic intussusception. The mesenteric glands were considerably enlarged.

Case 596.—Readmitted a year later with sarcoma of the ileum; resection and recovery. Subsequent operation for removal of enlarged glands abandoned.

Case 598.—Four feet of ileum were resected. The condition was caused by invagination of a Meckel's diverticulum. The child was very collapsed after operation, and was revived with the greatest difficulty; she was infused with saline and brandy to the point of intoxication, and lived on subcutaneous injections of 5 per cent. glucose for four days.

Case 599.—A Meckel's diverticulum had become invaginated, and had passed through the ileo-cæcal valve. Reduction was partly successful. Readmitted one month later with acute obstruction. At operation a piece of apple was found impacted at the site of anastomosis; enterotomy, lateral anastomosis, and recovery. See Case 399.

Case 603.—P.M.—The congested ileum was 12 in. in length and lay 15 in. above the ileo-cæcal valve. The lungs showed partial collapse at their bases. The liver and kidneys were pale and swollen.

ANALYSIS OF RESULTS.

General Mortality at Different Ages.

Age.	Number of cases.	Mortality, per cent.
0– 5	140	30
5–10	22	22·7
10–20	26	30·8
20–30	39	18
30–40	52	23·1
40–50	77	24·7
50–60	95	34·7
60 +	164	40·3
Total	615	31·2

Group A.—External Strangulation.

Inguinal :	Recovered.	Died.
Reduction	103	14
Invagination of gangrenous patches	3	2
Resection and anastomosis	7 [1]	7 [2]
Resection and drainage	1	2
Total	114	25

[1] Axial, 5; lateral, 1; end to side, 1.
[2] Axial, 5; lateral, 2.

Femoral :		
Reduction	84	9
Invagination of gangrenous patches	7	2
Resection and anastomosis	11 [3]	4 [4]
Resection and drainage	—	3
Drainage only	—	2
Total	102	20

[3] Axial, 9; lateral, 2.
[4] Axial, 2; lateral, 2.

Umbilical and Ventral:	Recovered.	Died.
Reduction	26	6
Invagination of gangrenous patches	1	2
Resection and anastomosis	2[1]	6[2]
Resection and drainage	1	2
"Short circuiting"	—	1
Drainage only	—	2
Total	30	19

[1] Axial, 1: lateral, 1.
[2] Axial in all.

Various:		
Reduction	2	2
Resection and anastomosis	—	1[3]
Total	2	3

[3] Axial.

The ileum was involved alone in all cases except the following:

Cæcum or colon alone: Inguinal, 5; femoral, 3; umbilical, 8.

Cæcum or colon with ileum: Inguinal, 7; umbilical, 8.

Mortality in Relation to the Duration of Acute Symptoms.

		Less than 1 day.	1 day.	2 days.	3 days.	4 days.	5 days.	6 days.	7 days.	Not counted.[1]
Inguinal	Recovered	50	24	21	11	4	—	—	—	4
	Died	7	7	1	4	2	1	—	—	3
Femoral	Recovered	25	20	19	20	6	5	—	2	5
	Died	—	5	2	3	2	1	2	2	3
Umbilical	Recovered	9	5	1	5	1	—	—	1	—
	Died	—	3	1	2	6	2	—	—	4
Ventral	Recovered	—	4	2	—	1	—	—	—	1
	Died	—	—	—	1	—	—	—	—	—
Various	Recovered	1	—	—	1	—	—	—	—	—
	Died	—	—	1	—	—	1	—	1	—

[1] Either because the period stated exceeded 7 days, or because the length of the history was not mentioned at all.

GROUP B.—NON-MALIGNANT OBSTRUCTION.

	Recovered.	Died.
Bands and Adhesions :		
Laparotomy and enterolysis	36	15
Invagination of gangrenous patches	—	6
Resection and axial anastomosis	1	3
Resection and ileo-colostomy	—	1
"Short circuiting"	—	1
Ileostomy	—	1
Colostomy	—	1
Operation abandoned	—	1
Total	37	29
Meckel's Diverticulum :		
Laparotomy and amputation of diverticulum	4	2
Ileostomy	—	1
Total	4	3
Volvulus :		
(*a*) Ileum :		
Resection and axial anastomosis	1	—
Resection and ileo-colostomy	—	1
Resection and drainage	—	2
(*b*) Pelvic colon :		
Incision and suture; appendicectomy	—	1
Total	1	4
Internal Hernia :		
Laparotomy and reduction	1	1
Impacted Gall-stone :		
Enterotomy and removal of stone	—	2
Simple Stricture :		
Laparotomy and lateral anastomosis	2	1
Granuloma of Ileum :		
Resection and axial anastomosis	—	2

	Recovered.	Died.
Strangulation by Mesentery :		
Laparotomy	1	—
Enterospasm :		
Laparotomy	5	—

Mortality in Relation to the Duration of Acute Symptoms.

	Less than 1 day.	1 day.	2 days	3 days	4 days.	5 days.	6 days	7 days.	Not counted.
Recovered	4	7	13	8	9	6	1	2	1
Died	4	2	11	8	6	3	1	3	4

GROUP C.—MALIGNANT OBSTRUCTION.

	Recovered.	Died.
Cæcum :		
Ileo-transverse anastomosis	2	—
Ileo-pelvic anastomosis	—	2
Ileostomy	—	1
Total	2	3
Transverse Colon :		
Resection and drainage	1	—
Ascending—transverse anastomosis	—	1
Ileo-transverse anastomosis	—	1
Transverse colostomy	—	3
Ascending colostomy	—	1
Cæcostomy	—	3
Ileostomy	—	1
Total	1	10
Splenic Flexure :		
Resection and drainage	1	—
Transverse colostomy	2	4
Cæcostomy	1	—
(Colostomy below the growth)	—	2
Total	4	6
Descending Colon :		
Transverse colostomy	1	—

	Recovered.	Died.
Ilio-pelvic Colon :		
Resection and drainage	1	—
Ilio-pelvic anastomosis	1	1
Iliac colostomy	7	7
Descending colostomy	1	—
Transverse colostomy	2	6
Cæcostomy	1	1
Total	13	15
"Colon" :		
Transverse colostomy	1	—
Rectum :		
Iliac colostomy	8	4
Transverse colostomy	1	3
Total	9	7
Pressure of Malignant Growth from without :		
Ileo-ascending anastomosis	—	1
Iliac colostomy	1	1
Cæcostomy	—	1
Total	1	3
Disseminated Growth :		
Resection, axial anastomosis, and iliac colostomy	1	—
Enterolysis and ileo-colostomy	1	—
Ilio-pelvic anastomosis	—	1
Iliac colostomy	1	—
Colostomy and ileostomy	—	1
Cæcostomy	1	—
Total	4	2

Summary.

	Recovered.	Died.
Resections	3	0
Short-circuit operations	4	7
Proximal drainage	29	37
Total	36	44

It is not possible to discuss mortality in relation to the duration of acute symptoms in this group, as in most of the cases the onset was gradual, chronic obstruction slowly becoming acute.

Group D.—Intussusception.

	Recovered	Died.
Entero-colic:		
Laparotomy and reduction	70	24
Resection and anastomosis	1	3
Resection and drainage	—	3
Drainage only	—	1
Total	71	31
Enteric:		
Laparotomy and reduction	3	1
Resection and anastomosis	3	3
Resection and drainage	—	1
Lateral anastomosis	1	—
Total	7	5
Cæcal and Colic:		
Laparotomy and reduction	5	—
Variety not stated:		
Laparotomy and reduction	5	1

Mortality in Relation to the Duration of Acute Symptoms.

	Less than 1 day.	1 day.	2 days.	3 days	4 days	5 days	6 days	7 days	Not counted.
Recovered	19	26	6	3	0	0	(?) 1	0	3
Died	8	14	5	5	3	1	0	0	1

A NOTE ON ANÆSTHETICS.

The following anæsthetics were employed:

(1) *Closed ether*, by means of the Clover apparatus, induction being carried out by nitrous oxide gas or by ethyl chloride.

(2) *C.E.*, given on an open mask, or on a wire cage covered with many layers of gauze. In many cases ether was used alone, and sometimes in combination with C.E. In the earlier years of the period under consideration this anæsthetic used to be given on a sponge contained in a metal inhaler.

(3) $CHCl_3$, always given on an open mask covered with lint. In a few cases the gas-ether sequence was used for induction.

(4) *Spinal.* The drugs most commonly employed were stovaine and tropacocaine.

(5) *Local.* Barker's solution, or varying strengths of eucaine and novocain. In some cases a little chloroform was given in addition.

(6) *Hedonal.* A 0·75 per cent. solution of hedonal in saline given intravenously at body temperature.

Frequency with which Different Anæsthetics were given.

	Group I.	Group II.	Group III.	Group IV.	Total.
Closed ether .	15	8	9	0	62
C.E. . . .	148	45	46	64	303
$CHCl_3$ . . .	77	33	21	50	181
Spinal . . .	23	1	1	8	33
Local . . .	13	1	2	0	16
Hedonal . .	7	1	1	0	9
Not stated . .	2	4	2	3	11
Total . .	315	93	82	125	615

Pulmonary Complications.

	No. of cases.	Bronchitis.	Pneumonia.	Total.
Closed ether	62	4 (2 died)	2 (1 died)	6 (3 died)
C.E.	303	13 (2 died)	7 (7 died)	20 (9 died)
$CHCl_3$	181	4	9 (9 died)	13 (9 died)
Spinal	33	—	—	—
Local	16	1 (1 died)	2 (2 died)	3 (3 died)
Hedonal	9	—	—	—
Total	604	22 (5 died)	20 (19 died)	42 (24 died)

Incidence of pulmonary complications = 6·95 per cent.

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39	A. F. 1910—97 c—5.	86	M. D. 1912—97 c—6.
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141	E. S.	1908—68 G—2.	194	J. H.	1910—97 G—31.
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143	E. B.	1908—68 G—4.	196	R. C.	1911—97 G—1.
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145	E. R.	1908—68 G—6.	198	S. G.	1911—97 G—3.
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202	S. S. 1911—97 G—8.	255	E. W. 1913—97 G—20.
203	A. W. 1911—97 G—9.	256	L. N. 1913—97 G—22.
204	A. T. 1911—97 G—10.	257	A. S. 1913—97 G—23.
205	M. C. 1911—97 G—11.	258	S. P. 1913—97 G—24.
206	M. S. 1911—97 G—12.	259	E. C. 1913—97 G—25.
207	E. J. 1911—97 G—13.	260	J. C. 1913—97 G—26.
208	M. S. 1911—97 G—15.	261	H. S. 1913—97 G—27.
209	A. G. 1911—97 G—16.	262	J. W. 1908—68 J—1.
210	H. L. 1911—97 G—17.	263	J. B. 1908—68 J—2.
211	S. I. 1911—97 G—18.	264	J. E. 1908—68 J—3.
212	L. C. 1911—97 G—19.	265	J. B. 1908—68 J—5.
213	M. L. 1911—97 G—20.	266	H. H. 1908—68 J—7.
214	M. L. 1911—97 G—21.	267	U. G. 1908—68 J—8.
215	E. S. 1911—97 G—22.	268	C. H. 1908—68 J—9.
216	J. G. 1911—97 G—23.	269	H. H 1909—92 B—2.
217	E. Y. 1911—97 G—24.	270	A. B. 1909—92 B—4.
218	E. F. 1911—97 G—25.	271	S. V. 1910—97 J—2.
219	J. H. 1912—97 G—1.	272	M. B. 1910—97 J—3.
220	E. C. 1912—97 G—2.	273	M. S. 1910—97 J—4.
221	M. H. 1912—97 G—3.	274	C. P. 1910—97 J—5.
222	R. B. 1912—97 G—4.	275	S. R. 1910—97 J—6.
223	A. H. 1912—97 G—5.	276	M. P. 1910—97 J—8.
224	G. N. 1912—97 G—6.	277	E. H. 1910—97 J—9.
225	A. P. 1912—97 G—7.	278	E. Y. 1911—97 J—1.
226	M. W. 1912—97 G—8.	279	C. P. 1911—97 J—2.
227	M. W. 1912—97 G—9.	280	M. C. 1911—97 J—3.
228	M. A. 1912—97 G—10.	281	C. P. 1911—97 J—4.
229	G. C. 1912—97 G—12.	282	T. M. 1911—97 J—5.
230	J. M. 1912—97 G—13.	283	M. R. 1911—97 J—6.
231	J. M. 1912—97 G—15.	284	E. D. 1911—97 J—7.
232	E. S. 1912—97 G—16.	285	A. A. 1911—97 J—8.
233	W. C. 1912—97 G—17.	286	R. T. 1911—97 J—9.
234	E. B. 1912—97 G—18.	287	M. M. 1911—97 J—10.
235	S. G. 1912—97 G—19.	288	W. B. 1911—97 J—11.
236	C. S. 1912—97 G—20.	289	E. E. 1912—97 J—1.
237	L. B. 1912—97 G—22.	290	G. G. 1912—97 J—2.
238	G. G. 1912—97 G—23.	291	R. W. 1912—97 J—5.
239	H. W. 1913—97 G—1.	292	M. A. 1912—97 J—6.
240	E. G. 1913—97 G—3.	293	O. G. 1912—97 J—7.
241	E. G. 1913—97 G—4.	294	A. B. 1912—97 J—8.
242	C. D. 1913—97 G—5.	295	R. J. 1913—97 J—2.
243	A. D. 1913—97 G—6.	296	J. A. 1913—97 J—3.
244	L. C. 1913—97 G—8.	297	E. W. 1913—97 J—4.
245	M. W. 1913—97 G—9.	298	E. O. 1913—97 J—6.
246	M. G. 1913—97 G—10.	299	M. D. 1913—97 J—10.
247	S. N. 1913—97 G—11.	300	W. H. 1913—97 J—11.
248	M. G. 1913—97 G—12.	301	M. W. 1913—97 J—14.
249	R. W. 1913—97 G—14.	302	E. C. 1908—68 J—6.
250	P. O. 1913—97 G—15.	303	H. R. 1910—97 J—1.
251	M. B. 1913—97 G—16.	304	M. M. 1910—97 J—7.
252	S. B. 1913—97 G—17.	305	V. G. 1912—97 J—3.
253	B. C. 1913—97 G—18.	306	C. H. 1912—97 J—4.

Reference Index—(*continued*).

Case number.	Reference number.	Case number.	Reference number.
307	W. V. 1913—97 J—1.	360	H. N. 1909—70—18.
308	C. S. 1913—97 J—7.	361	W. F. 1909—70—22.
309	A. A. 1913—97 J—8.	362	W. E. 1909—70—25.
310	M. R. 1913—97 J—9.	363	E. H. 1909—70—27.
311	A. B. 1908—68 L—3.	364	M. F. 1909—70—29.
312	C. M. 1910—97 L—1.	365	N. P. 1909—70—30.
313	A. Y. 1911—97 C—35.	366	G. H. 1909—70—31.
314	M. J. 1911—97 J—4.	367	A. G. 1910—75 A—16.
315	J. C. 1912—97 L—1.	368	E. P. 1910—75 A—18.
316	W. H. 1908—69—3.	369	S. R. 1910—75 A—19.
317	A. H. 1908—69—5.	370	E. C. 1910—75 A—23.
318	J. F. 1908—69—6.	371	F. N. 1910—75 A—24.
319	E. H. 1908—69—8.	372	F. A. 1910—75 A—25.
320	H. G. 1908—69—7.	373	M. P. 1910—75 A—26.
321	L. L. 1908—69—11.	374	E. C. 1911—75 A—15.
322	E. H. 1908—69—21.	375	J. W. 1911—75 A—18.
323	R. B. 1908—69—23.	376	A. S. 1912—75 A—8.
324	J. S. 1909—70—3.	377	E. A. 1912—75 A—10.
325	A. R. 1909—70—6.	378	C. D. 1912—75 A—11.
326	M. G. 1909—70—8.	379	B. J. 1913—75 A—17.
327	C. S. 1909—70—9.	380	E. M. 1913—75 A—20.
328	F. V. 1909—70—10.	381	M. D. 1913—75 A—21.
329	M. G. 1909—70—12.	382	C. S. 1908—69—14.
330	G. C. 1909—70—15.	383	H. F. 1913—75 A—4.
331	N. P. 1910—75 A—8.	384	C. D. 1910—75 A—10.
332	E. B. 1910—75 A—9.	385	L. R. 1913—75 A—4.
333	W. L. 1910—75 A—11.	386	J. S. 1909—70—17.
334	H. C. 1910—75 A—12.	387	G. B. 1909—70—20.
335	R. E. 1910—75 A—13.	388	A. T. 1913—75 A—18.
336	E. H. 1910—75 A—14.	389	C. S. 1911—75 A—5 *b*.
337	H. F. 1911—75 A—1.	390	J. P. 1910—75 A—21.
338	A. S. 1911—75 A—4.	391	E. L. 1910—75 A—22.
339	M. M. 1911—75 A—6.	392	R. C. 1911—75 A—10.
340	C. P. 1911—75 A—7.	393	H. S. 1913—75 A—19.
341	A. B. 1911—75 A—8.	394	C. T. 1913—75 A—11.
342	M. P. 1911—75 A—9.	395	W. H. 1911—75 A—12.
343	M. H. 1912—75 A—4.	396	C. K. 1908—69—28.
344	L. S. 1912—75 A—5.	397	E. T. 1913—75 A—16.
345	E. M. 1912—75 A—7 *a*.	398	W. B. 1912—75 A—6.
346	N. P. 1913—73—52.	399	J. S. 1913—75 C—11.
347	A. J. 1913—75 C—17.	400	T. B. 1913—75 A—22.
348	M. P. 1913—75 A—1.	401	E. D. 1911—75 A—17.
349	E. P. 1913—75 A—2.	402	C. W. 1913—97 A—660.
350	O. E. 1913—75 A—6.	403	T. M. 1911—75 A—5 *a*.
351	W. S. 1913—75 A—10.	404	H. D. 1911—75 A—3.
352	M. H. 1913—75 A—12.	405	H. R. 1911—75 A—5.
353	A. H. 1908—69—31.	406	A. S. 1913—75 A—3.
354	T. W. 1908—69—51.	407	A. D. 1913—75 A—7.
355	H. B. 1908—69—53.	408	L. F. 1913—75 A—9.
356	J. S. 1908 69—54.	409	T. H. 1909—70—1 *c*.
357	A. B. 1908—69—55.	410	J. B. 1913—75 B—8.
358	P. C. 1908—69—56.	411	A. F. 1910—75 B—7.
359	F. W. 1909—70—16.	412	M. R. 1911—75 B—16.

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Case number.	Referenee number.	Case number.	Reference number.
413	D. W. 1911—75 B—18.	466	G. N. 1911—75 B—2.
414	E. C. 1908—69—12.	467	H. A. 1911—75 B—4.
415	E. H. 1908—69—39.	468	W. E. 1913—75 B—1.
416	E. R. 1908—69—44.	469	W. S. 1913—75 B—2.
417	M. Y. 1910—75 B—5.	470	A. C. 1913—75 B—3.
418	C. W. 1910—75 B—9.	471	G. C. 1913—75 B—5.
419	M. H. 1911—75 B—13.	472	A. C. 1913—75 B—6.
420	J. G. 1912—75 B—8.	473	W. P. 1913—75 B—15.
421	E. M. 1912—75 B—9.	474	W. R. 1908—69—34.
422	S. B. 1912—75 B—14.	475	J. P. 1908—69—36.
423	M. M. 1912—75 B—16.	476	E. B. 1909—70—24.
424	A. P. 1913—75 B—19.	477	H. B. 1911—75 B—10.
425	M. B. 1908—69—24.	478	W. M. 1912—75 B—6.
426	G. B. 1909—70—7.	479	L. H. 1913—75 B—9.
427	A. H. 1911—75 B—8.	480	D. M. 1913—75 B—10.
428	C.R. 1911—75 B—14.	481	E. B. 1910—75 B—2.
429	E. C. 1908—69—30.	482	M. C. 1908—69—40.
430	J. G. 1911—75 B—9.	483	J. L. 1910—75 B—10.
431	S. M. 1911—75 B—12.	484	T. P. 1911—75 B—11.
432	H. W. 1912—75 B—10.	485	G. P. 1908—69—4.
433	J. D. 1912—75 B—11.	486	S. T. 1909—70—11.
434	A. H. 1913—75 B—18.	487	R. C. 1910—75 B—3.
435	J. H. 1913—75 B—7.	488	A. G. 1911—75 B—6.
436	J. G. 1908—69—2.	489	H. B. 1909—70—19.
437	J. D. 1908—69—25.	490	E. G. 1909—70—26.
438	R. F. 1909—70—1 *a*.	491	S. B. 1908—69—9.
439	F. C. 1909—70—14.	492	W. M. 1908—69—10.
440	A. F. 1910—75 B—1.	493	C. I. 1908—69—15.
441	W. W. 1910—75 B—4.	494	A. W. 1908—69—17.
442	M. C. 1911—75 B—3.	495	D. A. 1908—69—19.
443	M. B. 1911—75 B—5.	496	W. P. 1908—69—22.
444	R. S. 1912—75 B—1.	497	R. N. 1909—69 A—1.
445	E. H. 1912—75 B—3.	498	I. C. 1909—69 A—2.
446	A. B. 1912—75 B—4.	499	B. V. 1909—69 A—3.
447	J. S. 1913—75 B—4.	500	E. S. 1909—69 A—4.
448	A. B. 1913—75 B—11.	501	L. N. 1909—69 A—5.
449	H. S. 1908—69—29.	502	J. P. 1909—69 A—6.
450	G. L. 1908—69—41.	503	C. H. 1909—69 A—7.
451	L. M. 1908—69—43.	504	M. G. 1909—69 A—9.
452	J. A. 1908—69—46.	505	F. C. 1910—75 C—1.
453	M. G. 1909—70—21.	506	E. H. 1910—75 C—2.
454	F. L. 1910—75 B—8.	507	R. W. 1910—75 C—3.
455	H. W. 1911—75 B—15.	508	M. T. 1910—75 C—4.
456	R. H. 1911—75 B—17.	509	K. F. 1910—75 C—5.
457	A. G. 1911—75 B—19.	510	N. Y. 1910—75 C—6.
458	G. S. 1912—75 B—12.	511	S. S. 1910—75 C—7.
459	J. W. 1912—75 B—15.	512	G. G. 1910—75 C—9.
460	G. B. 1913—75 B—12.	513	E. M. 1910—75 C—10.
461	A. B. 1913—75 B—14.	514	I. C. 1910—75 C—13.
462	M. B. 1913—75 B—17.	515	E. L. 1910—75 C—16.
463	J. C. 1913—75 B—20.	516	F. G. 1910—75 C—17.
464	E. W. 1910—75 A—6.	517	C. M. 1910—75 C—18.
465	T. K. 1908—69—26	518	H. L. 1910—75 C—19.

Reference Index—(*continued*).

Case number.	Reference number.	Case number.	Reference number.
519	R. G. 1911—75 c—1.	568	W. F. 1909—69 A—13.
520	L. G. 1911—75 c—2.	569	G. P. 1909—69 A—14.
521	L. G. 1911—75 c—2.	570	L. W. 1910—75 c—21.
522	E. S. 1911—75 c—4.	561	G. G. 1910—75 c—22.
523	D. P. 1911—75 c—5.	572	E. B. 1911—75 c—18.
524	B. J. 1911—75 c—6.	573	K. B. 1911—75 c—19.
525	V. L. 1911—75 c—7.	574	L. W. 1911—75 c—19 *a*.
526	A. S. 1911—75 c—8.	575	L. S. 1911—75 c—21.
527	E. S. 1911—75 c—9.	576	T. M. 1911—75 c—22.
528	A. D. 1911—75 c—10.	577	E. S. 1911—75 c—22 *a*.
529	W. M. 1911—75 c—11.	578	H. M. 1911—75 c—23.
530	M. T. 1911—75 c—12.	579	E. S. 1911—75 c—24.
531	W. B. 1911—75 c—13.	580	G. H. 1911—75 c—25.
532	S. S. 1911—75 c—14.	581	W. C. 1912—75 c—13.
533	R. B. 1911—75 c—15.	582	P. J. 1912—75 c—15.
534	L. B. 1911—75 c—16.	583	G. T. 1912—75 c—16.
535	G. K. 1912—75 c—2.	584	W. M. 1912—75 c—18.
536	J. O. 1912—75 c—3.	585	E. T. 1912—75 c—19.
537	V. D. 1912—75 c—4.	586	M. P. 1912—75 c—20.
538	F. R. 1912—75 c—5.	587	J. S. 1912—75 c—21.
539	H. Y. 1912—75 c—6.	588	H. F. 1913—75 c—22.
540	R. P. 1912—75 c—7.	589	W. W. 1913—75 c—23.
541	S. B. 1912—75 c—8.	590	K. B. 1913—75 c—24.
542	A. W. 1912—75 c—9.	591	C. C. 1913—75 c—25.
543	H. M. 1912—75 c—11.	592	C. Y. 1913—75 c—26.
544	H. B. 1912—75 c—14.	593	W. W. 1910—75 c—8.
545	M. W. 1913—75 c—1.	594	L. C. 1910—75 c—15.
546	I. M. 1913—75 c—2.	595	W. B. 1910—75 c—20.
547	W. R. 1913—75 c—4.	596	J. R. 1912—75 c—5.
548	R. W. 1913—75 c—6.	597	G. B. 1912—75 c—10.
549	W. P. 1913—75 c—7.	598	M. R. 1912—75 c—12.
550	E. F. 1913—75 c—8.	599	J. S. 1913—75 c—11.
551	R. S. 1913—75 c—9.	600	G. P. 1908—69—47.
552	T. J. 1913—75 c—10.	601	F. S. 1909—69 A—16.
553	M. P. 1913—75 c—12.	602	G. B. 1911—75 c—20.
554	K. L. 1913—75 c—13.	603	M. B. 1912—75 c—17.
555	E. H. 1913—75 c—14.	604	L. P. 1913—75 c—21.
556	V. B. 1913—75 c—15.	605	A. B. 1908—69—1.
557	D. S. 1913—75 c—16.	606	E. G. 1908—69—16.
558	L. R. 1913—75 c—18.	607	I. S. 1910—75 c—12.
559	B. A. 1913—75 c—19.	608	S. L. 1910—75 c—14.
560	J. R. 1913—75 c—20.	609	S. H. 1913—75 c—5.
561	J. R. 1913—75 c—20.	610	M. R. 1908—69—20.
562	A. G. 1908—69—27.	611	P. W. 1909—69 A—8.
563	R. D. 1908—69—32.	612	E. W. 1910—75 c—11.
564	S. H. 1908—69—33.	613	A. B. 1912—75 c—1.
565	A. A. 1908—69—48.	614	W. H. 1913—75 c—3.
566	R. S. 1908—69—49.	615	F. M. 1909—69 A—12.
567	A. H. 1908—69—38.		

REPORT OF

THE OUT-PATIENT OBSTETRICAL DEPARTMENT FOR 1914.

By J. P. HEDLEY, M.A., M.B., M.C.Cantab.,
OBSTETRIC PHYSICIAN WITH CHARGE OF OUT-PATIENTS.

The Junior Obstetric House-Physicians for the year were Messrs. N. F. Hallows, E. J. Boyd, A. C. Balance, H. P. Dawson, and W. Burt.

The number of women attended in the out-patient maternity department from January 1st, 1914, to December 31st, 1914, was 1026. A few cases of threatened abortion are not included in this total.

The cases were made up as follows:

Single births	992
Twin births	13
Abortions	15
Transferred to Mary Ward	6
	1026

There were 377 children born before the arrival of the obstetric clerk; many of the mothers of these children had been seen early in labour by the clerk, but the presentations are not recorded in the following table, which shows the presentations that occurred:

Presentation.	Among single births.	Among twin births.	Total.
Vertex	599	14	613
Breech	17	7	24
Face	1	0	1
Transverse	2	1	3
Not stated (including "born before arrival" cases)	372	5	377
Children born			1018

The positions of the vertex observed were:

L.O.A	407
R.O.A.	169
R.O.P.	29
L.O.P.	8

In the 37 cases of occipito-posterior positions, reduction took place naturally or with medical aid in 22; of these 15 were R.O.P. and 7 were L.O.P. There were 15 cases in which reduction did not occur, and of these 14 were R.O.P. and 1 was L.O.P.

Children Born.—During the year there were 1018 viable children born, of whom 988 were living and 30 were stillborn.

The causes of the stillbirths are shown in the following table:

Prematurity	3
Maceration	6
Breech delivery	3
B.B.A. (vertex)	7
B.B.A. (breech)	2
Impaction of shoulders	2
Contracted pelvis	1
Placenta prævia	1
Fœtal ascites	1
Other causes	4
	30

Forceps was employed to assist delivery in 17 cases during the year; the indications for its use were delay in the second stage of labour in 12, contracted pelvis in 2, and posterior positions of the occiput in 3.

Complicated Labours.

During the year 6 cases of complicated labour were removed from the district into Mary Ward.

Breech with Extended Legs.—Two cases occurred during the year, and in both the legs were flexed and living children delivered.

Impacted Shoulders.—There were two cases; in both of which the children were stillborn. Both children were very large, one weighing 13½ lb.

Placenta Prævia.—Three cases were treated on the district; in 2 the child was lying transversely, and was treated by internal version.

Post-partum Hæmorrhage.—There were 5 cases, but none were of a very serious nature. In 3 the placenta was adherent and was removed manually. All the patients made satisfactory recoveries.

STATISTICAL REPORT

OF

THE OPHTHALMIC DEPARTMENT

FOR THE YEAR 1914.

By A. C. HUDSON, M.A., M.D., B.C.Cantab., F.R.C.S.Eng.,
OPHTHALMIC SURGEON TO OUT-PATIENTS.

During the year 1914 there were 3308 new out-patients, 1110 being male and 2198 female.

The total number of attendances of old and new patients was 8274, 3095 being male and 5199 female. There were 1967 new casualty patients, the total attendance of casualty patients being 7466. 268 patients were admitted to the ward, 143 being male and 125 female.

181 operations were performed on in-patients.

General Statement of In-patients.

Number of beds in ward (including small ward and four cots)	25
Number of patients in ward on Jan. 1st, 1914	25
,, ,, ,, Jan. 1st, 1915	21

Average number of patients resident daily, 19·75.

Analysis of In-patients—

	Discharged.	Died.	Total.
Male	144 ...	— ...	144
Female	127 ...	1 ...	128
			272

Table of In-patients.

Dermoid cyst of brow	2
Orbit.	
Cellulitis	1
Periostitis	2
Sarcoma	1
Eyelids.	
Abscess	2
Cellulitis	1
Entropion	4
Gummatous tarsitis	1
Trichiasis	1
Vaccinia	1
Lacrimal apparatus.	
Dacryocystitis	1
Epiphora	1
Lacrimal abscess	4
„ mucocele	7
„ sinus	1
Ocular muscles.	
Squint, convergent	9
„ divergent	2
Globe.	
Blind painful eye	5
Contusion	5
Panophthalmitis	6
Perforating wound	11
Rupture	1
Conjunctiva.	
Contracted socket	2
Episcleritis	1
Lime burn	1
Muco-purulent conjunctivitis	4
Ophthalmia neonatorum	2
Phlyctenular conjunctivitis	1
Pterygium	1
Trachoma	3
Cornea.	
Anterior staphyloma	1
Foreign body in	2
Keratitis, interstitial	6
„ neuropathic	2
Cornea—cont.	
Keratitis, phlyctenular	4
„ strumous	1
„ ulcerative	20
„ other forms	2
Kerato-iridocyclitis	1
Leucoma	4
„ adherens	2
Vaccinia	1
Iris and ciliary body.	
Anterior synechia	1
Blocked pupil	1
Iritis, syphilitic	6
„ unclassified	7
Iridocyclitis	7
Sympathetic ophthalmitis	1
Lens.	
Capsular membrane	6
Cataract, congenital	1
„ diabetic	2
„ lamellar	4
„ secondary	1
„ senile	35
„ traumatic	1
Retina.	
Detachment	3
Retinal hæmorrhage	1
Retinitis	2
Choroid.	
Choroido-retinitis	1
Sarcoma	1
Optic nerve.	
Atrophy	3
Neuro-retinitis	1
Retro-bulbar neuritis	1
Glaucoma.	
Congenital	1
Primary, congestive	7
„ non-congestive	8
Secondary	1
Intraocular hæmorrhage	1

Table of Operations performed on In-patients.

Removal of dermoid cyst of brow	2
Orbit.	
Incision for orbital cellulitis	1
Eyelids.	
Incision of lid abscess	2
Skin and muscle operation	1
Snellen's suture	1
Tarsorrhaphy	2
For trichiasis	2
Lacrimal apparatus.	
Excision of lacrimal gland	1
,, ,, sac	6
For lacrimal abscess	3
,, ,, sinus	4
Probing lacrimal passage	1
Ocular muscles.	
Advancement	1
,, with tenotomy	9
Globe.	
Enucleation	22
Evisceration	3
Conjunctiva.	
Excision of fornix	2
,, pterygium	1
Expression	6
For contracted socket	1
Cornea.	
Abscission of anterior staphyloma	1
Peritomy	1
Removal of foreign body	1
Saemisch section	3
Scraping of scar	1
Iris.	
Division of anterior synechia	4
Iridectomy for anterior synechia	4
,, for excluded pupil	4
,, optical	3
,, preliminary	9
,, for primary glaucoma	8
,, for prolapsed iris	7
,, for secondary glaucoma	2
Lens.	
Curette evacuation	2
Discission of capsular membrane	12
Extraction, after iridectomy	5
,, with ,,	24
,, without ,,	1
Needling of soft cataract	5
Sclera.	
Enucleation after evisceration	1
Scleral puncture	1
Trephining	11
General anæsthetic.	
Chloroform and ether	89

Cases of Hard Cataract.

During the year 30 hard cataracts were extracted, in 24 cases with iridectomy, in 5 cases after preliminary iridectomy, and in 1 case without iridectomy. Vision obtained was in 4 cases = $\frac{6}{6}$, in 6 cases = $\frac{6}{9}$, in 3 cases = $\frac{6}{12}$, in 3 cases = $\frac{6}{18}$, in 3 cases = $\frac{6}{24}$, in 2 cases $\frac{6}{36}$, in 2 = $\frac{6}{60}$, in 7 cases not determined.

Cases of Soft Cataract.

Seven soft cataracts were dealt with, 5 of them, of which 2 were of traumatic origin, by discission, and 2, of which 1 was secondary to iridocyclitis in a child and the other to diabetes in a woman *æt.* 32, by curette evacuation. The diabetic patient obtained V. = $\frac{6}{9}$, but died suddenly in diabetic coma three months after operation.

Cases of Glaucoma.

Fifteen cases of glaucoma were dealt with by operation, 4 being acute, 3 subacute, and 8 chronic in character. In 3 of the acute cases iridectomy, and in 1 scleral trephining (both eyes), was performed. In 2 of the subacute cases iridectomy, and in 1 scleral trephining (both eyes), was employed. Of the chronic cases 6 were treated by trephining and 2 by iridectomy (both eyes in 1 case).

Salvarsan and Neosalvarsan Treatment.

Treatment by intravenous injection was carried out in 11 cases; 1 case of syphilitic iritis and 1 case of syphilitic iridocyclitis was treated with salvarsan, and 3 cases of syphilitic iritis with neosalvarsan, the result in each case being excellent, as also in 1 case of syphilitic neuro-retinitis treated with neosalvarsan, in which vision improved in three weeks from = hand movements and $\frac{1}{60}$ to $\frac{6}{60}$ and $\frac{6}{18}$. One case of syphilitic interstitial keratitis treated with neosalvarsan, and subsequently with salvarsan, made satisfactory progress. Of cases in which evidence of syphilitic origin was absent, 1 case of iridocyclitis treated by neosalvarsan appeared to be favourably influenced, while 1 case of sympathetic iridocyclitis treated with four injections of neosalvarsan, and 1 case of iritis and 1 case of iridocyclitis treated with salvarsan, were not obviously benefited by the treatment.

REPORT

OF THE

DEPARTMENT FOR DISEASES OF THE SKIN.

1914.

By E. STAINER, M.A., M.D.Oxon, F.R.C.P.Lond.

Statistical

DISEASES.	Jan.		Feb.		March.	
	M.	F.	M.	F.	M.	F.
Acne rosacea	...	1	...	1	1	2
,, vulgaris	1	...	...	2	...	1
Alopecia	...	...	1	...	...	...
,, areata	5	...	2	3	2	1
Dermatitis artefacta	...	...	...	...	...	1
Drug eruptions	...	...	4	1	...	...
Dysidrosis	...	...	...	...	1	...
Eczema (various)	13	7	15	10	17	23
Erythema (various)	...	...	...	...	1	1
,, multiforme	1	...	1	...	...	2
,, nodosum	...	...	...	...	...	...
,, pernio	...	1	...	...	...	...
Folliculitis	...	...	...	...	2	1
Furunculosis	1	1	2	...	3	1
Herpes simplex	...	...	...	...	...	1
,, zoster	...	1	1	2	2	...
Ichthyosis	...	...	...	...	1	1
Leucodermia	...	...	...	...	...	...
Lichen simplex chronicus	...	1	...	...	...	...
,, planus	...	2	...	...	...	...
,, urticatus	...	...	1	2	1	...
Lupus erythematosus	...	...	...	...	1	...
Molluscum contagiosum	1	...	1	...	1	1
Nævi (various)	1	7	4	4	4	11
Pediculosis capitis	...	1	...	2	2	1
,, corporis	...	1	1	...	...	...
Pityriasis rosea	...	...	3	2	3	1
Pruritus	...	...	1	...	1	...
Psoriasis	4	6	3	3	2	2
Purpura	...	1	...	1	...	...
Pyodermia (Impetigo, etc.)	4	3	13	6	1	3
Rodent ulcer	...	...	...	1	...	...
Scabies	3	2	3	7	1	...
Seborrhœa capitis	...	...	...	2	1	...
Sycosis	...	...	1	...	1	...
Syphilis, congenital	...	...	...	1	...	...
,, secondary	...	3	...	3	...	4
,, tertiary	1	1	...	...	1	3
Tinea circinata	3	5	7	4	4	6
,, barbæ	...	...	...	...	...	...
,, tonsurans	27	10	15	7	10	6
,, versicolor	...	...	...	1	...	1
Tuberculosis (Lupus Vulgaris, etc.)	...	2	...	2	2	2
Urticaria	2	4	2	1	1	1
Verruca plana	...	...	...	1	...	1
Various	4	7	5	6	4	5

Table, 1914.

April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Total.
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
...	3	2	1	...	3	...	...	...	1	...	...	...	...	...	1	...	1	17
...	1	1	...	...	...	...	...	...	1	1	...	...	1	...	1	1	2	13
...	...	...	3	...	...	...	3	...	...	1	1	...	...	...	...	...	1	10
4	3	2	4	4	2	3	4	1	3	3	1	1	3	2	1	...	7	61
...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	3
...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	9
...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	3
12	16	10	11	13	11	12	12	7	12	14	16	11	16	9	17	2	11	297
...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	5
...	1	1	...	...	...	...	1	...	1	...	1	...	1	...	2	...	...	12
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	2	1	...	1	...	1	1	...	...	1	2	1	1	...	2	...	16
...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	11
...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	4
...	...	...	1	...	...	...	...	...	2	...	...	...	...	2	...	3	...	14
...	...	...	...	1	...	...	1	...	1	...	...	2	...	...	1	...	1	9
...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	...	...	...	3
...	2	...	...	...	1	1	...	...	...	1	...	1	...	...	...	1	1	9
...	...	...	2	...	...	2	1	1	...	...	1	...	2	...	1	1	...	13
5	1	1	...	1	...	...	...	...	...	4	2	2	...	1	...	...	...	21
...	...	...	1	...	...	...	1	...	1	1	...	...	1	...	1	...	...	7
1	...	...	2	1	1	...	...	...	...	...	...	...	...	...	...	1	1	11
6	11	6	9	2	4	3	10	1	3	4	10	5	5	2	4	2	10	128
...	...	1	3	...	2	...	1	...	1	...	1	...	...	...	1	...	2	18
1	1	...	1	1	2	...	...	...	...	...	...	1	...	2	1	...	...	12
...	...	1	2	...	...	...	3	...	1	...	...	1	1	2	...	...	1	21
...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	1	6
2	2	2	4	1	2	4	1	2	5	3	5	4	6	3	5	3	2	76
...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	4
11	3	7	3	7	3	6	3	3	5	8	5	14	1	5	4	3	6	127
...	...	1	2	...	...	1	...	...	2	...	...	1	1	1	...	...	1	11
2	2	4	2	4	7	...	...	...	...	5	1	3	...	5	...	2	1	54
1	...	1	...	1	2	1	...	1	...	...	2	...	...	1	...	...	1	14
1	...	3	...	1	...	...	...	1	...	2	...	2	...	1	...	...	...	13
...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	1	...	5
1	...	...	1	...	...	...	...	...	2	1	2	1	...	1	2	...	...	21
...	...	...	4	...	...	...	5	...	...	1	2	1	1	...	2	1	...	23
2	6	2	1	1	2	3	...	3	1	3	3	2	2	...	2	3	4	69
...	...	2	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	5
9	6	12	13	14	8	12	2	1	7	18	15	15	14	5	3	2	5	226
...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	1	...	5
...	1	...	1	...	2	...	1	...	1	4	3	1	2	...	1	...	...	25
1	3	...	...	...	2	1	1	1	3	1	3	...	...	...	1	2	...	30
...	1	2	2	1	1	1	...	...	...	1	4	...	3	...	...	1	...	19
10	5	6	7	4	6	9	6	4	4	...	6	3	2	2	3	3	...	111
																		1571

REPORT

OF

THE THROAT DEPARTMENT (OUT-PATIENTS).

By W. G. HOWARTH, M.A., M.B., B.C.Camb., F.R.C.S.Eng.,
SURGEON IN CHARGE OF THE DEPARTMENT.

The statistical report of the Out-patient Department is drawn up on lines similar to those followed in recent years. Only out-patients are included, and the statistics do not include in-patients or patients referred from other departments.

The statistics of operations performed on patients admitted from the department will be found in the General Surgical Report under the headings: "Diseases of the Respiratory System," "Diseases of the Digestive Tract," and "Diseases of the Mouth and Pharynx."

Total Number of Cases treated during the Year 1914.

Disease.	Number of patients.		
	Male.	Female.	Total.
A. Affections of the mouth, fauces, and tonsils .	125	111	236
B. „ „ „ nose and accessory cavities .	175	166	341
C. „ „ „ naso-pharynx, pharynx, and œsophagus	68	65	133
D. Affections of the larynx	35	22	57
E. „ general and miscellaneous . .	10	3	13
Totals	413	367	780

A. *Affections of Mouth, Fauces, and Tonsils.*

Disease.	Number of patients.		
	Male.	Female.	Total.
Acute tonsillitis	6	4	10
Peritonsillar abscess	1	3	4
Chronic follicular tonsillitis	35	44	79
,, ,, ,, and adenoids	76	59	135
Syphilis of soft palate	1	1	2
Papilloma of soft palate	1	0	1
Carcinoma of soft palate	1	0	1
Sarcoma of tonsil	2	0	2
Carcinoma of tonsil	1	0	1
Fibroma of tonsil	1	0	1
Totals	125	111	236

B. *Affections of Nose and Accessory Cavities.*

Disease.	Number of patients.		
	Male.	Female.	Total.
Epistaxis	8	6	14
Fractured nasal bones	1	0	1
Foreign body in nose	1	1	2
Lupus of nose	0	1	1
Chronic osteitis of superior maxilla	0	1	1
Hæmangeioma of septum	1	0	1
Sarcoma of antrum	0	1	1
Injury to nose	1	0	1
Asthma	1	1	2
Atrophic rhinitis	3	7	10
Dry rhinitis	6	2	8
Hypertrophic rhinitis	32	53	85
Chronic rhinitis	5	3	8
Traumatic ulceration of septum	2	0	2
Syphilitic rhinitis	5	1	6
Nasal polypi	16	22	38
Deflected septum	75	55	130
Chronic frontal sinusitis	3	2	5
Ethmoidal suppuration	7	4	11
Chronic maxillary antritis	7	6	13
Sphenoidal sinusitis	1	0	1
Totals	175	166	341

C. *Affections of Naso-pharynx, Pharynx, and Œsophagus.*

Disease.	Number of patients.		
	Male.	Female.	Total.
Chronic naso-pharyngitis	6	10	16
Adenoids	16	31	47
Chronic pharyngitis	29	18	47
Foreign body in deep pharynx	1	1	2
Carcinoma of pharynx	1	0	1
Syphilis of pharynx	6	3	9
Keratosis of pharynx	2	0	2
Carcinoma of œsophagus	3	0	3
Dysphagia ? cause	3	2	5
Retro-pharyngeal abscess	1	0	1
Totals	68	65	133

D. *Affections of the Larynx.*

Disease.	Number of patients.		
	Male.	Female.	Total.
Acute laryngitis	6	5	11
Chronic laryngitis	5	2	7
Hypertrophic laryngitis	2	0	2
Tuberculous laryngitis	8	3	11
Syphilitic laryngitis	5	1	6
Carcinoma of larynx	5	0	5
Functional aphonia	1	10	11
Right recurrent paralysis	2	1	3
Left recurrent paralysis	1	0	1
Totals	35	22	57

E. *General and Miscellaneous.*

Disease.	Number of patients.		
	Male.	Female.	Total.
Purulent dacryocystitis	1	0	1
Dysphagia, post diphtheritic	0	1	1
Pyorrhœa alveolaris	6	1	7
Dental cyst	2	1	3
Abscess of lip	1	0	1
Totals	10	3	13

REPORT

OF THE

EAR DEPARTMENT OF ST. THOMAS'S HOSPITAL

FOR THE YEAR 1914.

By H. J. MARRIAGE, M.B., B.S.Lond., F.R.C.S.Eng.,
AURAL SURGEON IN CHARGE OF OUT-PATIENTS.

New Cases treated during the Year 1914.

Disease.	Males.	Females.	Total.
Diseases of the external ear	70	67	137
,, ,, middle ear	379	413	792
,, ,, internal ear	28	32	60
,, ,, nose, mouth and pharynx	29	33	62
Miscellaneous	6	26	32
Total	512	571	1083

Disease.	Males.	Females.	Total.
A. Diseases of the External Ear.			
Eczema of auricle	6	3	9
Eczema of internal meatus	3	5	8
Injury of external meatus	1	—	1
Acute otitis externa	12	15	27
Furuncle of external meatus	6	3	9
Foreign body in external meatus	2	—	2
Cerumen	40	41	81
Total	70	67	137
B. Diseases of the Middle Ear.			
Otitis media:			
Acute suppurative	42	57	99
Chronic ,,	180	163	343
,, ,, with polyp	33	15	48
Acute non-suppurative	9	6	15
Chronic ,,	38	85	123
Acute mastoid disease following acute otitis media suppurativa	3	10	13
Acute mastoid disease following chronic otitis media suppurativa	3	4	7
Old mastoid disease	12	15	27
Otosclerosis	1	2	3
Sclerosis following chronic otitis media suppurativa	17	20	37
Eustachian obstruction:			
Adenoids	30	30	60
Other causes	11	6	17
Total	379	413	792
C. Diseases of the Internal Ear.			
Deaf-mutism	1	2	3
Ménière's symptoms	—	1	1
Nerve-deafness	26	27	53
Congenital syphilis	1	2	3
Total	28	32	60

Disease.	Males.	Females.	Total.
D. Diseases of the Nose, Mouth, and Pharynx.			
Hypertrophic rhinitis	2	7	9
Atrophic rhinitis	2	3	5
Acute rhinitis	6	2	8
Chronic rhinitis	—	4	4
Deflected septum nasi	10	8	18
Empyema of frontal sinus	—	1	1
Ethmoiditis	—	1	1
Empyema of antrum Highmori	2	3	5
Nasal polypi	3	1	4
Epistaxis	—	1	1
Acute tonsillitis	3	—	3
Peritonsillar abscess	1	—	1
Chronic pharyngitis	—	2	2
Total	29	33	62
E. Miscellaneous Diseases.			
Gland over mastoid	2	3	5
Glands of neck	1	—	1
Neuralgia	—	2	2
Parotid abscess	—	1	1
Mental deficiency	—	1	1
Hysterical deafness	—	1	1
Neurosis	—	5	5
Medical	3	3	6
Dental caries	—	3	3
Nihilitis	—	7	7
Total	6	26	32

Operations performed in the Out-patients' Theatre.

Operation.	Males.	Females.	Total.
Removal of tonsils and adenoids	76	81	157

REPORT FOR 1914

FROM THE

LOUIS JENNER CLINICAL AND PATHOLOGICAL LABORATORIES, ST. THOMAS'S HOSPITAL.

By LEONARD S. DUDGEON, F.R.C.P.

The total number of examinations conducted in the Clinical Laboratory during the year was 2688.

Tumours.—The number of specimens was 468.

Of these—

140 were carcinomata.
16 were sarcomata.
9 were endotheliomata.
1 was rodent ulcer.

Making a total of 166 malignant tumours. The remainder (302) consisted of non-malignant tumours, enlarged glands, uterine curettings, etc.

448 *bacteriological* examinations were made from specimens of pus, urine, etc.

In addition 253 cultivations from the throat and nose were examined for diphtheria: of these 59 were positive and 194 negative. Tubercle bacilli were sought for in 160 sputa and 82 urines: they were found 30 times in the sputa and 12 times in the urines.

Complement fixation reactions.—The Wassermann reaction was performed 520 times, it was positive in 187 cases and negative in 333.

The tuberculous complement fixation test was carried out on 32 occasions with 9 positive results and 23 negative ones.

Urines.—100 specimens of urine were examined for casts, estimation of urea, etc., and Cammidge's reaction on the urine was performed 12 times with 9 positive and 3 negative results. In addition 8 urinary calculi were examined chemically.

Agglutination reactions for typhoid were done on 33 occasions; the test was positive 7 times.

In addition to the serum tests previously mentioned, 282 examinations of the blood were made; these included "complete" and leucocyte counts, estimations of the fragility of the red cells, examinations for malarial parasites, etc.

Other examinations (290) included the cyto-diagnosis of exudates, the chemical analysis of gastric contents, examination of milk for tubercle bacilli and of syphilitic lesions for the *Treponema pallidum*, etc., while the vaccine treatment both of in-patients and of out-patients was carried on as in previous years.

REPORT

OF THE

X RAY DEPARTMENT, 1914.

SUPERINTENDENT—ARCHIBALD D. REID.

Total number of cases 1913	=	5773
„ „ „ 1914	=	5708
Decrease in number of cases	=	65

Classification as follows:

	Males.	Females.
Injury to bone: Upper extremity	1161	486
„ „ Head and chest	219	113
„ „ Lower extremity	1016	344
Diseases of bone	468	426
Examinations for foreign bodies (non-ingested)	70	99
„ „ (swallowed)	40	30
Renal cases	316	240
Abdominal examinations	130	90
Chest examinations (non-tubercle)	189	103
„ „ (tuberculous)	33	37
Examinations for Metropolitan police	98	*nil*
Total for Males	3740	1968
„ Females	1968	
Grand Total	5708	

TREATMENT.

Some explanation is necessary of the figures given for new patients in the 1913 report. The number given was 2262, and was arrived at by adding together the figures for each month representing the total number of patients attend-

ing the department for that month, and therefore does not properly represent the total number of new patients.

In 1914 it reached 3042, the figure for January being 249, and for July 305. After that time there was a considerable fall due to the war, the number for December being only 188. Further the work of the Department was purposely lightened owing to the staff being short handed.

The actual attendances average a little over two per patient per month, so that the total attendances may be put at over 6000.

Cases.—Tinea. There was a considerable increase in numbers, for which an outbreak in a large orphanage was partly responsible. This was rapidly stamped out, forty-two cases being treated.

Total number of cases treated was 212, of which 185 were cured in 3 to 5 weeks = 87 per cent. (1913 figure = 65 per cent.); 24 were cured in over 5 weeks and under 3 months = 11 per cent. (1913 figure = 24 per cent.); 3 cases needed a second application = 1 per cent. (1913 figures = 10 per cent).

Complications.—Follicular sepsis following megalosporon type of infection, 5 cases.
Eczema, 1 case.
Permanent alopecia, 0 case.

The rest of the cases are tabulated as follows:

Case.	Cured.	Improved.	Not improved.	Ceased attending.	Total.
Carcinoma, mostly of breast (1)	—	3	5	—	10
Prophylactic treatment following operation	—	2	—	—	
Rodent ulcer	6	—	—	—	7
Eczema (2)	21	6	—	3	30
Psoriasis (3)	7	1	—	2	10
Lichen planus	1	1	—	2	4
Lupus vulgaris (4)	11	—	—	5	16
Alopecia areata (5)	20	—	—	2	22
Tinea barbæ and sycosis	9	1	—	1	11
Pruritus and lichenification	5	—	—	—	5

Case.	Cured.	Improved.	Not improved.	Ceased attending.	Total.
Bazin's disease and other tuberculides	5	—	—	1	6
Graves' disease	—	3	—	4	7
Leucocythæmia	—	1	—	1	2
Lymphadenoma	—	4	—	—	4
Acne	2	—	—	—	2
Seasonal prurigo	—	2	—	—	2
Acne rosacea	—	4	—	—	4
Keloid	—	3	—	—	3
Miscellaneous	—	—	—	—	10

Notes.

(1) The improvement noticed in these cases is only that due to the relief of pain and stiffness. Superficial nodules diminish in size and disappear, but deeper lesions are practically unaffected. In the prophylactic cases the wound is stimulated to more rapid healing and there is a relief from stiffness.

(2) The numbers in this section are less than last year, because of the many demands on the department.

(3) The cures in this group are only temporary, and in no way lessen the liability of recurrence. The cases chosen are exclusively those of old thickened patches.

(4) X rays in this section are used in conjunction with the mercury vapour lamp.

(5) These cases are treated with the mercury vapour lamp only.

REPORT

OF

THE TUBERCULOSIS DEPARTMENT

FOR THE YEAR 1914.

By R. C. WINGFIELD, M.B.Oxon., M.R.C.P.Lond.

The report for 1914 has been drawn up on the same lines as the 1913 report, with some additional tables dealing with patients who have been under treatment during 1913–1914.

There have been a few alterations in the organisation of the department. The Ward is now under the care of Dr. Mackenzie and Dr. Perkins, each taking six months duty as visiting Physician. During the last six months Mr. McKay has very kindly come to the Department every Saturday morning to examine and treat all patients needing dental treatment: this has been of the greatest value. Arrangements were made during the course of the year with the Borough Tuberculosis Dispensaries of Wandsworth and Battersea, and with the Central Lambeth Tuberculosis Clinic, to enable them to send patients through the Department for opinion and treatment to the special departments of the Hospital. The Department has also been used this year by the London Insurance Committee for expert opinion on patients recommended to them for sanatorium treatment by panel doctors. The lectures to patients, on home treatment and prevention, have been carried on, and are well attended. It has been decided that contacts under 12 years of age shall in future be examined in the Department and not in the children's department as heretofore.

Table I.

Showing the numbers for 1914. Under No. 4 come patients in whom the disease was too advanced for out-patient treatment, those sent for opinion only, and those who were definitely diagnosed in a short time as not tuberculous.

(1) Total number of cases dealt with		1170
(2) New patients in 1914—		
Males (N.I.)	113	
,, (I.)	271	
Females (N.I.)	304	
,, (I.)	128	
		— 816
(3) Patients who attended one month or more, including 1913 patients—		
Males (N.I.)	102	
,, (I.)	218	
Females (N.I.)	349	
,, (I.)	117	
		— 786
(4) Patients attending less than one month, including 1913 patients—		
Males (N.I.)	53	
,, (I.)	141	
Females (N.I.)	132	
,, (I.)	58	
		— 384
(5) Total number of attendances during 1914		6998

Table II.—*Source of Cases.*

This table corresponds fairly closely with that for 1913, save that the patients sent by the other hospital departments are fewer. But, as the department took in over 350 cases from the out-patient department at the beginning of 1913, the number is really larger this year.

Hospital:		
Males (N.I.)	34	
,, (I.)	62	
Females (N.I.)	134	
,, (I.)	18	
		— 248
Private Doctor:		
Males	10	
Females	43	
		— 53
Panel Doctor:		
Males	99	
Females	33	
		— 132

N.I. = Not insured. I. = Insured.

Central Clinic:		
Males	11	
Females	19	
	—	30
Insurance Committee:		
Males	23	
Females	8	
	—	31
Charitable Societies:		
Males (N.I.)	9	
,, (I.)	3	
Females (N.I.)	12	
,, (I.)	5	
	—	29
Contact:		
Males (N.I.)	30	
,, (I.)	40	
Females (N.I.)	95	
,, (I.)	16	
	—	181
Privately:		
Males (N.I.)	19	
,, (I.)	38	
Females (N.I.)	39	
,, (I.)	16	
	—	112

Table III.

Showing the districts from which these patients came.

Lambeth	610	Surrey	8	Hounslow	2
Wandsworth ...	95	Kent	7	Hampstead	2
Battersea	112	Essex	7	Croydon	2
Southwark	90	Holborn	4	Acton...	2
Camberwell... ...	88	Hammersmith ...	4	Henley	1
Westminster ...	25	Woolwich	5	Whitechapel	1
Bermondsey ...	22	Marylebone ...	4	Portsmouth	1
Wimbledon... ...	15	Willesden	3	Dalston	1
Kensington... ...	12	Islington	4	Hackney	1
Lewisham	10	Fulham	3	Richmond	1
Kingston	10	Finsbury	3	Staines	1
Greenwich	11	Herts	3		

Table IV.—*Diagnosis.*

Pulmonary tuberculosis	370	
Lupus and surgical tuberculosis	44	
	—	414
Non-tuberculous and suspected tuberculous		402

The tuberculous have been further classified under Inman's classification, viz.:

I. Resting febrile	128
II. Ambulant febrile. Resting afebrile	76
III. Ambulant afebrile	106

Lupus, 12. Surgical tuberculosis, 32.

Table V.—*Results of Treatment.*

The economic classification on the patient's fitness or unfitness for work has been used again this year. For this classification the patients are divided into four classes.

Class A: Those who at the beginning of treatment were fit to work and remained fit.

Class B: Those who at the beginning of treatment were unfit to work, but became fit.

Class C: Those who at the beginning of treatment were fit to work, but became unfit.

Class D: Those who at the beginning of treatment were unfit to work and remained unfit.

(*Class B is the Class C of last year's Report.*)

General results of all cases:

A	513	= 74·5	per cent.
B	52	= 8·1	,,
C	18	= 2·9	,,
D	115	= 18·3	,,
Died	10	= 1·3	,,

Table V*a*.

Results of those patients who had hospital treatment during the year:

Males (N.I.)	6	Results: A	14
,, (I.)	17	B	14
Females (N.I.)	15	C	0
,, (I.)	4	D	14
	42		

Table V*b*.

Number and details of cases sent to sanatorium during 1914, and their results:

Males (N.I.)	17	A	59
,, (I.)	38	B	30
Females (N.I.)	23	C	1
,, (I.)	19	D	6
	97	Died	1

Table V *c*.

The results for 1913 and 1914 of patients who had sanatorium treatment during 1913:

	1913.		1914.
A	52	... ...	65
B	22	... ...	1
C	0	... ...	4
D	14	... ...	6
	—	Died	7
	88	Lost sight of ...	5

Table V *d*.

The results for 1913 and 1914 of those who had had sanatorium treatment in previous years:

	1913.		1914.
A	79	... ...	75
B	1	... ...	2
C	1	... ...	4
D	15	... ...	14
	—	Died... ...	1
	96		

Table V *e*.—*Tuberculin*.

The therapeutic use of tuberculin has been continued during 1914. The number treated is not large, the cases are carefully selected from the apyrexial patients. In most instances it has followed sanatorium treatment, in cases where the patient though improved was not in any way arrested, and where it was thought better results ought to be obtained. Two years is too short a time in which to draw any definite conclusions, since it has been used chiefly in those cases where the duration of the disease is usually five years or more. In no cases have there been any very striking results. The results in the economic classification are here only recorded. The tuberculins used were Beraneeks, Bacillary Emulsion, and Old Tuberculin.

Number treated during 1914, 57. Results:

A	49
B	3
C	1
D	3
Died	1
	57

Table VI.—*Contacts.*

The same lines have been followed in dealing with contacts this year as last.

Males (N.I.)	30	Results: Tuberculosis	25
„ (I.)	40	Doubtful and kept under observation	53
Females (N.I.)	95	Non-tuberculous	103
„ (I.)	16		
	181		181

It has not been possible to obtain the full figures from the Children's Out-Patient Department this year.

Table VII.

Special departments to which patients were referred. This table is of great interest in showing one of the many advantages of a dispensary being attached to a hospital.

Dental	151
X-Ray	76
Throat	49
Medical out-patients	36
Surgical out-patients	32
Gynæcological	24
Ophthalmic	15
Skin	10
Pathological	4
Physical exercise	4
Mental	3
Ear	3
Creosote room	3
	410

Table VIII.—*The Ward.*

Patients in for diagnosis:

		Tuberculous.	Non-tuberculous.
Males (N.I.)	3	1	2
„ (I.)	15	7	8
Females (N.I.)	10	4	6
„ (I.)	12	6	6

Patients in for treatment:

Males (N.I.)	3	Results: A	6
„ (I.)	20	B	21
Females (N.I.)	10	C	—
„ (I.)	7	D	13

Table IX.

Showing some figures for patients under treatment during 1913 and 1914.

1. 294 patients in Class A 1913 gave results in 1914 thus:

A	280
B	6
C	0
D	3
Died	5

27 patients in Class B 1913 gave results in 1914 thus:

A	25
C	1
Died	1

13 patients in Class C 1913 gave results in 1914 thus:

B	2
D	11

38 patients in Class D 1913 gave results in 1914 thus:

B	8
D	25
Died	5

	1913.	1914.
II. Inman I	12	36
„ II	35	10
„ III	252	253

Table X.—*Visits.*

For the figures in this and the following tables I am indebted to the Northcote Trust.

Visited by Hospital Phthisical Visitors	925
„ Health Societies	53
„ Church Relief Visitors	73
„ Charity Organisation Society	28
„ other agencies	19
Not visited. (Patients for opinion only, living in service or in common lodging houses)	82
Children dealt with as contacts and visited from the Children's Out-patient Department	114

Table XI.—*Relief.*

Referred to the Charity Organisation Society for material assistance	113
Referred to Church Relief Committee for material assistance	31
Referred to Guardians for material assistance	23

Nature of assistance:

(A) Homes, Sanatoria, and Hospitals—

Patients sent to Sanatoria through National Insurance ...	86
,, sent to Sanatoria through charitable agencies ...	72
,, sent to Homes through National Insurance	1
,, sent to Homes through charitable agencies	43
,, sent to Chest Hospitals through National Insurance	1
,, sent to Chest Hospitals through charitable agencies	36
,, boarded out in the country through National Insurance	2
,, boarded out in the country through charitable agencies	21

(This difference in numbers between this Table and Tables V*a* and V*b* is accounted for by the fact that in Tables V*a* and V*b* only patients who completed a full term of hospital or sanatorium treatment and those recommended in 1914 are counted. In this Table all for whom payment in 1914 has been made and all for whom full arrangements were made whether they stayed their full time or not are counted.)

(B) Other help—

Patients given extra food through National Insurance ...	55
,, given extra food through charitable agencies ...	88
,, allowed the use of shelters	18
,, whose family were given an allowance during treatment	49
,, who were given extra clothing	31
,, who had help with housework	46
,, who had work found for them	18
,, who were given beds and bedding	11
,, who were sent to training homes	1
,, who were given fares to the country	11
,, who had loans	7
,, who were helped to emigrate	3
,, who were given teeth and other surgical appliances	45

REPORT

OF THE

PHYSICAL EXERCISE AND MASSAGE DEPARTMENT FOR 1914.

By RICHARD TIMBERG, M.R.C.S.(Eng.), L.R.C.P.(Lond.), G.D.(Stockholm).

The work in this Department proceeded steadily on its established lines during the first part of 1914. During the latter part of the year it could not fail to be powerfully affected by the outstanding event, which has since then influenced all forms of human activity, the great war.

The first and immediate effect was the loss of the valuable help of Mr. C. M. Page, F.R.C.S., M.S., who had kindly undertaken to superintend the Department during the August holiday, as he was called out at once to the Front. Several other changes and losses, temporary and permanent, occurred amongst the regular workers in the Department on the men's side. Included amongst these losses was the porter, whose duty it is to keep the record of the patients; and this has unfortunately led to some omissions, so that the number of cases recorded (1394) falls undoubtedly somewhat short of the true total of patients actually treated.

On the other hand must be mentioned the great number of cases which were represented by wounded soldiers. Already, within a month of the commencement of the war, such cases were, as we know, received at St. Thomas's Hospital, and it did not take long before they found their way to the Physical

Exercise and Massage Department. A great number of the early cases were merely worn and foot-sore (or, as the official diagnosis demanded, suffering from "septic feet"). Their recovery was, as might be expected, very rapid, and for a short period the number of practically fit men referred to the Department, while waiting for their discharge, was so great that exercises had to be arranged for them in two batches of about thirty each in the Medical School gymnasium. No attempt was made at recording the attendance of these men, and they are not included in the list of patients; only a few of the more serious cases of septic feet are entered.

Another heading in the list that obviously refers to soldiers is "gun-shot" wounds; but it ought to be explained that this covers flesh wounds only. In the very numerous cases where such injuries have involved fractures of bones as well, they have been entered as such under their appropriate headings along with similar injuries in civilian patients. Various other classes of injury have, in the same way, been much augmented by the inclusion of soldiers. Altogether about 100 military cases were thus treated during the last four months of 1914; and considering that they were practically all in-patients, requiring daily attendance and often for a very prolonged period, it will readily be understood that this has made a very considerable addition to the amount of work in the Department. In fact, it would have been impossible to deal with it with the regular staff of workers, if it had not been decided very wisely that the lady students in the Massage School might undertake suitable cases amongst the soldiers. In this way, and by all working at high pressure, it has been possible to provide the massage treatment, which is required by such a very great proportion of the wounded.

Table of Cases Treated in the Physical Exercise and Massage Department during 1914.

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Fracture:						
Spine . . .	1	—	1			
Upper extremity:						
Clavicle . .	13	3	16			
Scapula . .	1	2	3			
Humerus . .	64	34	98			
Carried forward .	79	39	118			

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Brought forward	79	39	118			
Ulna	35	5	40			
Radius	67	65	132			
Radius and ulna combined	39	18	57			
Carpus and hand	25	5	30			
Lower extremity:						
Femur	13	10	23			
Patella	26	9	35			
Tibia	24	6	30			
Fibula	43	9	52			
Tibia and fibula combined	26	5	31			
Tarsus and foot	12	2	14			
				389	173	562
Trauma				19	8	27
Gunshot wounds (soft parts only)				22	—	22
"Septic feet" (soldiers)				6	—	6
Sprains				15	4	19
Dislocations				30	8	38
Internal derangement of knee-joint				30	8	38
Injury to other joints				10	10	20
Chronic synovitis				18	7	25
Teno-synovitis				1	1	2
Bursitis				1	1	2
Ankylosis				1	1	2
Cicatricial contractions				2	10	12
Ditto after cellulitis				11	12	23
Cut tendons and nerves				18	4	22
Rupture of muscles				3	2	5
Arthritis:						
Gonorrhœal	4	5	9			
Infective	2	5	7			
Osteo	31	26	57			
Rheumatoid	4	14	18			
Gouty	5	—	5			
				46	50	96
Tuberculous affections of joints				13	7	20
Spinal curvatures:						
Scoliosis	9	38	47			
Kyphosis	9	25	34			
Deformity of chest	1	1	2			
Defective development	3	11	14			
Spondylitis	3	—	3			
				25	75	100
Cervical rib				—	6	6
Torticollis				7	8	15
Congenital deformities of upper extremity				2	1	3
Dupuytrens contracture				3	—	3
Mallet finger				1	—	1
Coxa vara				1	1	2
Genu valgum				3	1	4
Talipes equinus				1	1	2
Talipes calcaneus				1	—	1
Talipes varus				8	1	9
Talipes equino-varus				4	2	6
Talipes equino-valgus				—	1	1
Pes cavus and hammer-toes				2	2	4
Pes valgus				10	6	16
Pes planus				16	27	43
Carried forward				719	438	1157

Diagnosis.	M.	F.	Total.	M.	F.	Total.
Brought forward				719	438	1157
Metatarsalgia				—	1	1
Hallux rigidus				2	—	2
Hallux valgus				—	2	2
Hemiplegia				4	3	7
Paraplegia				2	1	3
Spastic paralysis				—	2	2
Syringomyelia				1	1	2
Amyotrophic lateral sclerosis				3	—	3
Landry's paralysis				1	—	1
Sub-acute combined degeneration				2	—	2
Disseminated sclerosis				2	5	7
Tabes				1	—	1
Poliomyelitis				12	8	20
Progressive muscular atrophy				1	—	1
Post-diphtheritic paralysis				2	—	2
Erb's paralysis				1	—	1
Traumatic paralysis				6	1	7
"Trench back"				3	—	3
Peripheral neuritis				4	2	6
Sciatica				16	7	23
Neuralgia				—	3	3
Raynaud's disease				1	3	4
Occupation neurosis				—	2	2
Neurasthenia				1	5	6
Functional				2	11	13
Chronic bronchitis				—	1	1
Phthisis				1	1	2
Thickened pleura				1	—	1
Mitral disease				1	1	2
Cardiac neurosis				1	—	1
Arteriosclerosis				—	1	1
Thrombosis				4	1	5
"Frost bite"				4	—	4
Adiposis dolorosa				—	1	1
Constipation				2	2	4
Enteroptosis				—	2	2
Enterospasm				—	2	2
Abdominal adhesions				—	1	1
Weak abdominal walls				3	—	3
Incipient hernia				2	—	2
Post-operative debility				3	11	14
General debility				5	4	9
Fibrositis				16	3	19
Rheumatic headache				—	1	1
Miscellaneous					8	15
Mercurial inunction				23	—	23
Total				859	535	1394

RECENT ADDITIONS TO THE MUSEUM.

By S. G. SHATTOCK, F.R.C.S.,

CURATOR OF THE MUSEUM.

20 B. Portion of the right Vastus internus Muscle in which there is a fairly circumscribed new formation of oval form, and $2\frac{1}{2}$ in. in chief, vertical, diameter.

Microscopic examination shows the neoplasm to be a fibroma or fibro-sarcoma in which true ossification is in progress, the trabeculæ being invested with osteoblasts, and including stellate bone corpuscles.

The parts were excised by Mr. Robinson, November, 1913, from a man who had observed a painless swelling in the thigh for about fourteen days.

706 A. The Scaphoid with the semilunar bone, from each hand, which were dislocated in a fall from a bicycle, and successfully excised.

From a patient under the care of Mr. C. S. Wallace, January, 1914.

855 A. A Cyst about the size of a cherry which was removed from the maxillary antrum.

In its growth it had produced absortion of the anterior wall of the cavity, in the situation of the canine fossa, and bulged beneath the cheek, where a swelling had been noticed for ten years. In the recent state the cyst contained a thick fluid in which cholesterin was suspended.

From a woman, about 40 years of age, admitted under the care of Mr. Howarth, July, 1914.

871 A. A Rabbit's Skull, of which the two lower incisors have grown forwards to an abnormal length in consequence of a loss of apposition with the upper, possibly from their having been loosened by periodontal inflammation.

The upper incisors are likewise unnaturally long from the same want of apposition and of attrition, and are sharply curved backwards.

891 B. A Uvula with portion of the Soft Palate, viewed from the lower or buccal aspect.

The uvula is enlarged, and in places ulcerated, from the growth of a squamous-celled carcinoma.

From a man, æt. 54, a carman, admitted January, 1914, under Mr. Howarth. He had noticed a fulness in the throat for about a month, and tenderness on swallowing. After a preliminary tracheotomy the hard palate was sawn through and the parts removed. Recovery was uninterrupted, deglutition being unattended with pain.

The cervical glands subsequently became diseased, and the patient died eighteen months later in an infirmary, without there being any local recurrence.

1056 A. A much contracted Cæcum with its Appendix and the termination of the Small Intestine, the contraction having ensued upon chronic tubercular ulceration.

A microscopic examination of the enlarged lymphatic glands from the immediate neighbourhood showed that they were strewn with giant-celled systems.

The parts were excised by Mr. Corner, March, 1914, from a man, æt. 42, who was admitted with chronic obstruction, and a mass in the right iliac fossa. He had suffered from pulmonary disease two years ago, which had since become quiescent.

1087 E. A longitudinal section of portion of the Pelvic Colon.

The bowel is extremely rigid and contracted, the mucosa being unnaturally folded, and the muscular wall thickened. The subperitoneal fat is abnormally abundant and adherent to the gut: in its deeper part there may be recognised many ill-defined, more translucent, greyish areas, which microscopic examination shows to be due to the presence of a translucent cell-free exudate.

The mucosa and muscularis are normal in structure.

The parts were excised from a patient, æt. 47, by Mr. Sargent.

From July to December, 1910, he had suffered from intermittent diarrhœa, which was diagnosed as dysentery.

In July, 1911, the bowel was scalded with an enema, by an Arab attendant; the mucosa afterwards hung down in strips and had to be cut away with scissors. Diarrhœa persisted, with intervals, throughout 1911, and was accompanied with a discharge of blood, pus, and mucus.

In January, 1912, on sigmoidoscopic examination, several ulcers and a spasmodic stricture near one of the chief were discovered.

The condition remained much the same until November, 1912, when two doses of salvarsan were given. The patient had had a hard chancre in 1888, and slight palmar and plantar eruptions in November, 1912; there had been no symptoms between.

The general condition and the stricture slowly improved.

In February, 1913, severe and painful diarrhœa came on, and two swellings appeared in the left groin. In March, 1913, cæcostomy was carried out, and the stricture was dilated; several small ulcers were seen; the mucosa was spongy and readily bled. An abscess was opened in the left groin; the colon was irrigated and bougies passed.

The patient was discharged, much improved, in June, 1913.

In October, 1913, the parts shown in the specimen were excised. Death occurred a week later.

1087 F. A longitudinal section of portion of the Colon from the left iliac region. The gut is strikingly rigid and contracted, the mucosa being unnaturally folded and the muscular wall thickened.

The subperitoneal fat is abnormally abundant, being, in places, an inch in thickness.

Histological examination did not reveal anything abnormal in the various structures removed.

The parts were excised from a woman, æt. 63, by Dr. Hedley.

She had suffered from tenesmus following defæcation, lasting from five minutes to a quarter of an hour, for three or four years.

For the last two years the stools had been flattened, and the patient had suffered from constipation. This was accompanied with increased frequency of micturition.

On rectal examination a mass was felt in front of the rectum, which was taken to be a fibro-myoma of the uterus.

After laparotomy the uterus was found to be normal. The piece of thickened intestine was removed between clamps, and an end-to-end union made.

1098 Ab. A Vermiform Appendix which was successfully excised.

Its walls are thickened, and its lumen partially distended with mucin.

From a lady, æt. 24, who had suffered from three attacks of appendicitis during the year preceding the operation.

When it was exposed the appendix was free of adhesions, and appeared pale and thickened.

On being pinched with forceps it contracted and turned up on end.

Presented by C. S. Wallace, Esq.

1119 A. A vertical section of portion of the Small Intestine. Into its interior, at the site of the attached border, there projects a pedunculated tumour about the size of a walnut.

Microscopic examination shows it to be a spindle-celled sarcoma, the nuclei of some of the cells of which are of striking size. The characters of the cells in certain of the interlacing fasciculi suggest that a malignant transformation has taken place in what was originally a myoma.

The parts were removed by operation from a woman, æt. 45, who had suffered for three weeks with abdominal pain, accompanied with slight distension. Vomiting had supervened for forty-eight hours.

Rectal examination revealed nothing. On the abdomen being opened there was found to be an intussusception of the small intestine due to the presence of an internal tumour which completely blocked the lumen.

The intussusception was easily reduced before the excision of the gut with the contained growth was carried out, after which an end-to-end union was made.

1129 A. Portion of a Colon excised for a recurrent carcinoma. The neoplasm is somewhat ill defined, and has a papillary surface which is in places disintegrating. On each side it has extended through the muscular coat; on the right an extension is traceable in the surrounding fat; and above this there is an enlarged lymphatic gland. Histological examination shows it to be a columnar-celled carcinoma.

The first operation was carried out March, 1906. The patient, a woman, æt. 70, had a tight carcinomatous stricture of the pelvic colon; this was successfully excised. Symptoms of obstruction returned, and a second excision was carried out in November, 1907; the patient died.

Presented by Dr. H. A. Lediard.

1203 C. Portion of a Cæcum which in the recent state was much congested and œdematous.

Into the lower part there projects a hemispherical eminence, which represents the inverted stump of the appendix, which had been previously excised.

The parts were successfully removed by Mr. S. Rouquette from a boy, æt. 5, who had been operated upon twelve days previously for intussusception.

The intussusception had been reduced by operation, the appendix removed, and the stump of the latter buried by two purse-string sutures.

The patient remained well until the ninth day, when vomiting set in. An elongated, transversely disposed mass could be felt in the epigastric region.

On laparotomy an intussusception was discovered; this could not be fully reduced; and as the wall of the cæcum gave way, the cæcum, with about 3 in. of the ascending colon, and 2 in. of the ileum, were removed, an end-to-end union being made.

1297 Aa. A slice of Liver which was treated in the recent state with a mixture of ferrocyanide of potassium and hydrochloric acid.

The surface has been rendered of an intense Prussian blue colour, indicating the presence of iron in the hepatic cells which has been unmasked by the action of the hydrochloric acid.

From a case of lymphadenoma.

1309 A. A small slice from a typically cirrhotic (probably alcoholic) Liver. Its free surface is coarsely granular, and its section composed of sharply defined, polyhedral lobes, the connective tissue between which is of a bright yellow colour.

The macroscopic lobes comprise, for the most part, more than one of the proper hepatic lobules—"multilobular cirrhosis."

The yellow colour, as told by microscopic examination, is due to the presence of yellowish-brown pigment in the hepatic cells, the epithelium of the bile ducts, and in the fibrous tissue: the pigment in all these positions gave an intense Prussian blue reaction, showing the presence of iron in it.

This reaction is not infrequently obtainable in cases of cirrhosis.

1317 D. Two small slices from the Liver of a Syphilitic Fœtus which was stillborn, in a "macerated" or autolysed condition. Large numbers of the *Spirochæta pallida* were demonstrated in the autolysed structure by Levaditi's method of staining.

The upper piece is viewed from the outer aspect; in the

investing peritoneum there are uniformly scattered, in considerable number, minute, whitish, circular points, or miliary gummata. None such are recognisable in the divided surface of the piece below.

The placenta was not apparently diseased.

1354 A. A Cast, which was removed from the gall-bladder, and consists of necrotic mucous membrane.

From a woman, admitted under the care of Mr. Wallace. She had had several attacks of biliary colic during the past seven years, but had not been jaundiced till two months ago. There was tenderness in the right hypochondrium. When exposed at the operation the gall-bladder appeared of normal size and appearance, but on opening it and inserting the finger, the mucous membrane came completely away; the gall-bladder contained a few calculi. Recovery was uninterrupted.

1437 D. A vertical section of a Spleen, in the upper end of which there is a Cyst about the size of a Tangerine orange. At its highest part it is invested only with the splenic capsule.

The contents consisted of a clear serous fluid, which solidified in the formalin used for the preservation of the specimen.

The lesion was found unexpectedly after death, in a girl, æt. 6, who died with acute suppurative inflammation of the hip-joint.

1468 E. Two specimens of Lingual Thyroids or Goîtres, which were removed, in different cases, from the base of the tongue.

The higher is about the size of a walnut; its divided surface presents a somewhat coarse mesh of connective tissue, the spaces of which are filled with transparent colloid, as in the thyroid gland. The growth, where it protrudes above the general level, is covered with attenuated mucous membrane.

From a girl, æt. 17, admitted under Mr. Howarth, December 18th, 1913. A swelling projecting from the dorsum of the posterior part of the tongue had been noticed since birth.

Tracheotomy was first performed, the proper thyroid being at the same time examined; glandular tissue was found on both sides, and an isthmus was likewise present over the first ring of the trachea; but the gland as a whole was below the proper size.

The tumour was then removed from the tongue, and the wound sutured. The patient was discharged January 4th, 1914.

The lower specimen, which closely resembles the other, was removed from a woman, æt. 21.

On the performance of the preliminary tracheotomy, it was noticed that there was no proper thyroid isthmus; the lateral lobes were well marked. The patient first noticed a swelling nine months previously on the back of the tongue; it interfered with deglutition, and led to some dyspnœa when she stooped.

1696 A. A short piece of a Femoral Artery, in which there is a well-defined circular aperture involving about half its circumference, and due to gunshot.

The aperture was connected with a false aneurysm which formed as a result of the injury.

From a private, æt. 20, wounded in the European War (1914), at Neuve Chapelle, March 10th, 1915, by a bullet which passed through the lower third of the thigh.

The patient lay for two days in the trenches before being moved to the Field Hospital.

The aperture of entry was on the inner side of the thigh over the lowest part of Hunter's canal; that of exit was in the popliteal space. There was nothing abnormal about either wound.

The patient was admitted into the Red Cross Hospital on March 17th. There was then œdema of the foot and a pulsating hæmatoma beneath the aperture of entry.

Severe arterial hæmorrhage occurred on March 19th. An incision was made over the lower part of Hunter's canal, when it was found that the bullet had passed between the vein and the artery at the spot where they wind round the femur.

In addition to the wound of the artery there was found to be a ragged opening in the vein.

The damaged parts of both vessels were excised.

On March 31st there was another violent hæmorrhage; the wound was opened, when the bleeding was found to come from the unsealed distal end of the divided artery. The vessel was traced down, and another ligature applied to it about three-quarters of an inch below.

April 6th: The collateral circulation was good; general progress was excellent.

Presented by C. S. Wallace, Esq., and L. E. C. Norbury, Esq.

1696 B. A piece of the Femoral Artery and Vein, about an inch and a half in length, which were excised for a gunshot injury.

The artery has been half divided, and the vein completely so, a considerable portion of the latter having been carried away.

From a private, æt. 19, wounded in the European War (1914). The bullet traversed the right thigh and entered the inner side of the left, where it was arrested against the femur.

On March 21st, 1915, severe hæmorrhage occurred, for which the wound in the left thigh was firmly plugged.

When admitted to the Field Hospital on March 22nd the patient was very ill, being pallid, and with a rapid pulse. The plug was at once removed, and the wound explored. There was a large ragged cavity containing much blood, on the inner side of the femur.

The hæmorrhage was found to come from Hunter's canal, which formed the roof of the cavity; the pieces of artery and vein shown were thereupon excised.

A blood-smear showed the presence of streptococci, and the patient died of sepsis on March 26th, a good collateral circulation having been established.

Presented by C. S. Wallace, Esq., and L. E. C. Norbury, Esq.

1733 C. Portion of Omentum, of which certain of the lymphatic vessels are strikingly dilated and varicose.

The regular constrictions in their course result from the presence of the valves.

Where most pronounced the breadth of the varicose vessels is equal to that of the thumb.

The omentum was removed from a woman, æt. 44, admitted under Dr. Tate, July, 1914, with a history of abdominal pain of ten years' duration; intervals of six months occasionally occurred, during which the pain was absent.

On examination a large uterine tumour (fibro-myoma) was discovered. Supra-vaginal hysterectomy was carried out, both tubes and the right ovary being removed, together with the omentum preserved as the specimen. The cause of obstruction was not determined.

1797 Aa. The left half of a Thyroid Cartilage, with the Mucosa, etc., of the Pyriform Fossa, removed by operation.

From the mucous membrane of its inner wall there has grown a prominent tumour which fills the fossa, and which microscopic examination shows to be a squamous-celled carcinoma.

The cervical glands of the left side were secondarily diseased.

From a man, æt. 57, admitted under Mr. Howarth, 1913, complaining of sore throat of about nine weeks' duration. The patient left the hospital a month after the operation; the vocal cord came across the middle line, and the voice was good, though somewhat rough. Further recurrence in the cervical glands subsequently appeared.

1847 A. Portion of the Upper Lobe of a Lung, solidified as a result of acute pneumonia.

In its substance there is an irregular ragged excavation about 2 in. chief diameter, due to necrosis of the inflamed tissue. The walls of the space are lined with necrotic tissue.

From a man, æt. 48, admitted November, 1913, under the care of Dr. Turney, with a painful cough of four weeks' duration, fœtid sputum, and loss of weight. The sputum had been blood-stained for the last twenty-four hours.

There were signs of cavitation in the right upper lobe.

The patient had suffered from gout for fourteen years.

1910 A. A quadrilateral piece of the Mucosa of the Naso-pharynx from which there projects a prominent, triangular, granulated mass of lymphoid tissue—"adenoid vegetations."

The parts were removed from a child, æt. 8, admitted under Mr. Howarth, 1916.

The symptoms consisted of constant "colds in the head," nasal obstruction, and mouth breathing; there was no deafness.

After the operation, which was carried out with a caged curette, all the symptoms disappeared.

1912 A. A soft oval Tumour about the size of a hen's egg which projected into the naso-pharynx.

The divided surface is nearly everywhere translucent.

Microscopic examination shows the neoplasm to be a myxofibroma.

The growth was successfully removed by Mr. Howarth from a man, æt. 18, who a year previously began to notice difficulty in breathing through the nose. On posterior rhinoscopy a large smooth mass was seen filling the naso-pharynx and bulging the palate. After preliminary tracheotomy the palate was split, and the tumour enucleated. It was found to arise from the back of the ethmoid, and extended into the basisphenoid, in which there was left a cavity admitting a small sponge.

1960 D. The Right Hemisphere of a Brain and of the Cerebellum, from a case in which the longitudinal sinus was thrombosed.

The several meningeal veins, except at the base, are filled with clot; some superficial hæmorrhage has occurred beneath the arachnoid in the course of some of the vessels.

From a female child, æt. 3, who was admitted in November, 1913, with broncho-pneumonia.

Two days after admission retraction of the head occurred, but without other signs indicative of meningitis.

1963 B. Portion of the Left Hemisphere of a Brain with part of base of the skull.

Lying over the the sella turcica, and immediately above the pituitary body, there is a spherical tumour 1½ in. in diameter. The growth, which is connected with the meninges, is sharply defined, and compresses the adjacent part of the brain without invading it.

Microscopic examination shows the neoplasm to be an endothelioma.

The patient, a man, æt. 41, who was admitted under Dr. Turney, July, 1913, first attended as an out-patient in February, 1908, for failing vision. In May, 1908, the left eye was quite blind.

An X-ray picture showed the sella turcica to be normal.

The administration of thyroid and pituitary extracts produced no improvement.

In June, 1913, the patient was completely blind: there were no other neurological changes; he slept a good deal, and suffered from attacks of vomiting and headache; pulse slow (56). There was general loss of power in the limbs.

In September, 1913, bitemporal decompression was carried out. The operation was well borne, but consciousness was not recovered and death occurred twenty-four hours later.

1981 A. The Right Hemisphere of the Cerebrum of a child.

The chief part of the parietal lobe, with the posterior part of the frontal, are shrunken and depressed as a result of thrombosis in the territory supplied by the middle cerebral artery. The shrinkage has led to marked widening of the sulci.

From a boy, æt. 2, admitted in October, 1913, under the care of Dr. Box.

The cerebro-spinal fluid gave a positive Wassermann reaction and contained many lymphocytes.

The child was the first and only one; there had been no miscarriages. When 2 months old a rash appeared on the buttocks. Six months ago a fit occurred during sleep, in which the right arm became stiff and was drawn across the trunk; the arm became normal in four weeks' time. Three months ago a similar fit occurred, recovery again ensuing. The child was hydrocephalic when admitted; there was constant slow rolling of the eyes, with nystagmus; the pupils were very small; all reflex jerks were exaggerated.

2083 B. Half of a Kidney which was treated in the recent state with a mixture of ferrocyanide of potassium and hydrochloric acid

Both at the free surface and in that divided it has become of a deep Prussian blue colour (except the pyramids) from the presence of iron in the renal cells, which has been unmasked by the action of the acid.

From a woman, æt. 68, who for three years had suffered from progressive loss of strength, the skin becoming of a lemon yellow. The blood on examination showed the microscopic features of pernicious anæmia. The patient was intolerant of arsenic.

2096 Aa. A vertical section of a Kidney, from the hilum of which there projects an ovoidal tumour about $3\frac{1}{2}$ in. in chief, vertical, diameter; the renal substance is prolonged for a short distance over its upper pole.

The neoplasm has the pale yellow colour characteristic of renal tumours arising in misplaced adrenal tissue, this colour being due (like that of the normal adrenal) to the presence of fat in the cells.

In several spots hæmorrhage has occurred, and centrally the growth has undergone mucinoid degeneration.

Histological examination shows the neoplasm to have the structure of an adrenal adenoma, and to consist of large polygonal cells with vacuolated cytoplasm holding fat: the cell groups are supported by a very scanty stroma; the vessels are numerous and thin-walled.

The kidney was removed in August, 1914, by Mr. C. A. R. Nitch, from a female patient, æt. 48, who had suffered for many years from right-sided nephroptosis.

Two days before the nephrectomy she was seized with acute pain in the right loin; her medical attendant then noticed that the organ had become much enlarged.

The pain apparently followed two violent attacks of sneezing, and was accompanied with diminished secretion of urine. On cystoscopic examination the efflux from the right ureter was scanty and blood-stained.

The patient was in good health in June, 1915.

Presented by C. A. R. Nitch, Esq.

2378 C. A Right Ovary bisected, with a piece of the Fallopian tube. The portion on the right-hand side is polycystic, that on the left is half of a fibrous tumour about the size of a hen's egg, which has grown from the ovarian stroma.

Histological sections exhibit the usual structure of fibromata growing in this position; they consist of intersecting

bundles of elongated cells with large oval nuclei, the appearances reproducing those proper to the stroma of this particular organ.

From a woman, æt. 36, admitted under Dr. Tate, July 13th, 1914.

Menstruation had been regular until her first miscarriage ten years ago, since when it was more frequent and irregular; the other symptoms were backache and frequency of micturition.

Complete hysterectomy was carried out, the right tube and ovary being likewise removed.

2444 A. A Cervix Uteri with the highest part of the Vagina, showing the external characters of a carcinoma arising from the portio vaginalis.

The new growth forms a slightly raised, coarsely granular or nodulated elevation which involves about a third of the free surface.

Microscopic examination proved the neoplasm to be a squamous-celled carcinoma.

The parts were removed by Dr. Fairbairn from a woman, æt. 39, admitted September, 1913, the mother of eleven children.

Menstruation had been normal until the birth of her last child, thirteen months previously, and which was stillborn.

Since then the loss of blood had become more and more frequent, and, at last, daily.

Vaginal examination disclosed the presence of a large friable growth from the cervix.

2444 B. Half of a Uterus at about the fifteenth week of pregnancy.

The posterior lip of the external os, with the adjoining portion of the vagina, are the seats of a carcinomatous lesion, shown microscopically to be of the squamous-celled variety.

From a woman, æt. 33, the mother of two children (the last of whom was born in 1905), admitted with a history of abdominal pain and hæmorrhage for six weeks. The uterus was removed by Dr. Fairbairn in February, 1914.

The patient was readmitted in June, 1914, with a recurrent ulcerating carcinoma of the vaginal wall, which was excised.

2499 Ba. A Pregnant Uterus, which was removed for the intramural fibro-myoma growing in the substance of the cervix. The tumour is of a dull, somewhat violet colour from blood-staining (" red degeneration ").

At the back of the preparation the fœtus is displayed *in situ* within its membranes.

From a woman, æt. 44, admitted under Dr. Hedley, April, 1914.

She had had three children, the last of whom was 22 years of age.

Menstruation had been regular till two years ago, when the periods came on every fourteen days, and ceased during the last two months.

Fourteen days before her admission she suffered from two attacks of abdominal pain, each of which lasted about three days.

On admission, an abdominal swelling could be felt an inch below the umbilicus.

The uterus was successfully removed on April 29th, 1914.

2522 D. Half of a Breast in the margin of which there has grown a tumour, which microscopic examination shows to be a spheroidal-celled carcinoma of the softer variety.

The tumour, which is about the size of a Tangerine orange, has a well-defined, crenated margin, and has almost reached the skin on one aspect and the pectoralis major muscle on the other. The polycystic condition of the uninvolved portion of the breast indicates that it is the seat of chronic mastitis. With the breast is mounted half of one of the axillary glands, which is much enlarged from secondary disease.

The parts were removed from a woman, æt. 55, who had had twelve children. Two years ago she struck the right breast; and three months later she noticed a small, hard, painless nodule in its lower half, which two months afterwards became painful and increased more rapidly. The pain was mostly of a burning character, but occasionally radiated into the axilla, in which enlarged glands were palpable.

2569 A. Half of a congenital Tumour, 5 cm. (2 in.) in chief diameter, which was removed from an infant shortly after birth; it grew from the gum on the front of the lower jaw, near the middle line.

Histologically the neoplasm consists of large, highly granular cells, like those which precede the appearance of fœtal adipose tissue. The use of Sudan III did not reveal the presence of any free fat.

There was a second, smaller tumour attached to the gum of the upper jaw, which was removed at the same time; the base of each growth was afterwards cauterized. Four other children were alive and healthy.

2583 B. Half of a spheroidal Tumour, about the size of a Tangerine orange, which has grown in the subcutaneous fat and involves the corium over its most prominent part. Microscopic examination shows the growth to be a hæmangeio-fibroma of the capillary kind, into the connective tissue of which some hæmorrhage has taken place; the amount of blood in the vessels has given the tumour the appearance of a hæmatoma.

From a woman, æt. 50, who two years previously noticed a tumour the size of a pea at the lower end of the forearm. During the last two months the increase had been rapid; this was attributed to an injury.

The skin over the tumour was involved and in certain areas discoloured. At the operation the growth was found to arise from the fascia between the flexor carpi ulnaris and the extensors of the wrist and fingers.

2591 A. A left Index Finger, bisected.

Growing from the skin on the palmar aspect, over the second and third phalanges there is a lowly lobulated, melanotic sarcoma, the surface of which is ulcerated. The subjacent bones are uninvolved.

The tumour appeared after a crush of the finger, and had been noticed three months before admission.

The hand was amputated by Mr. Ballance, March, 1914, and the axillary glands, which were infected, were removed.

The patient afterwards died with generalised metatasis.

2620 E. A Mouse, into the subcutaneous tissue of the left side of the thorax of which there was transplanted a minute portion of a carcinoma which arose spontaneously in the mamma of another mouse. The animal was killed fifty-three days after the experiment.

A tumour as large as a filbert has grown from the transplanted fragment, but the skin over it is intact; nor is the thoracic wall invaded. In each of the lungs there are a few minute metastases, which exhibit the same microscopic structure as the main tumour. The lungs are not adherent to the parietes.

Presented by the Imperial Cancer Research.

2620 F. A Mouse, in the subcutaneous tissue of which, on the right side, there is a lobulated tumour which extends over the side of the thorax and abdomen.

The growth was raised by grafting portion of a tumour (No. 100 Imperial Cancer Research) from a strain raised from one arising spontaneously in another mouse.

The peculiarity of the tumour in question (a carcinoma) is that in its growth it excites the connective tissue of the host to produce a sarcomatous neoplasm, which as it grows replaces the carcinomatous element. The tumour shown is of seventy-two days' growth: microscopic examination showed that the substitution was not, in this instance, yet complete.

2620 G. A Mouse, beneath the skin of the right side of which there are two tumours which were produced by grafting portions of a tumour which arose spontaneously in another mouse.

Presented by the Imperial Cancer Research.

2620 H. A Mouse, upon which a grafting experiment similar to the preceding was carried out.

Twenty-one days previously, minced embryonic mouse skin had been inserted through a cannula beneath the skin.

This has completely inhibited the growth of the grafted carcinomatous material: the inhibition invariably results under such circumstances. If the embryonic mouse skin is inserted after the graft has commenced to grow, no inhibition or curative effect is produced.

Presented by the Imperial Cancer Research.

St. Thomas's Hospital Medical School.

(UNIVERSITY OF LONDON.)

PROSPECTUS

FOR THE

YEAR COMMENCING OCTOBER, 1915.

1915 & 1916.

LONDON

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ST. THOMAS'S HOSPITAL, VIEW FROM RIVER.

St. Thomas's Hospital

MEDICAL SCHOOL.

The WINTER SESSION 1915-1916 will begin on Monday, October 4th, and end on March 31st.

The SUMMER SESSION will begin on Monday, April 24th, and end in July.

The Prizes will be distributed in the latter part of the Summer Session.

The Annual Dinner of past and present Students will not be held this year.

For information on all matters relating to the Medical School, Prizes, Scholarships, &c., application should be made to the Secretary to the Medical School, G. Q. ROBERTS, Esq., at the Hospital, Albert Embankment, S.E., personally 10 to 4 (Saturdays excepted), or by letter.

The Dean will be glad to have a personal interview with Parents or Guardians of intending Students by appointment.

The Sub-Dean attends daily, at 1.30, except on Saturdays, to sign Schedules and interview Students or their friends with the view to giving advice on courses of study.

ST. THOMAS'S HOSPITAL.

The exact date of the foundation of the first Hospital of St. Thomas is unknown; but since it was dedicated to St. Thomas à Becket, who was canonised in 1172, and as the building was destroyed by fire in 1207 its origin may be fixed between those two dates. It was the property of the Church, and was situated within the precinct of the Priory of St. Mary Overie, in the Borough of Southwark. After the disaster of 1207 a temporary building was used so that the work of charity did not fail in the 21 years which elapsed before the new Hospital was ready for use. In 1228, the new building, in close proximity to the old, but on the other or eastern side of the road, received its charter, in which it is worth noting that it was described as "ye ancient Spitil." In the year 1538 the Hospital, still known as St. Thomas à Becket's Spitil, was surrendered to King Henry VIII. at the time of the general confiscation of church properties. Evidence of the good work which the old Hospital had been doing is clearly given by the fact that the necessity for its re-establishment soon made itself felt, and was satisfied only by the issue of a new charter with re-endowments and privileges in the year 1553 under the hand of King Edward VI. At the same time its dedication was transferred from St. Thomas à Becket to St. Thomas the Apostle.

From its foundation to the year 1862 the Hospital occupied its old site, but in that year the property was sold for the railway extension and the transfer to the present position was shortly after carried into effect.

The present buildings occupy an imposing position on the Surrey or south bank of the river, facing the Houses of Parliament, while their opposite aspect overlooks one of the poorest districts in London. Between the poverty-stricken streets of Lambeth and the Hospital there lies, however, a considerable tract of ground which was formerly attached to Lambeth Palace and was generously given for the use of the public by the Archbishop of Canterbury. Just beyond the extreme limit of the Hospital is the Palace itself. These few words will show how uniquely suited is the site to the character of the institution. On the one side it faces the wealth of the west, on the other the squalor of the east, while the river on the one side and the public park on the other provide the free access of light and air which are absolutely essential for the welfare of the sick. The foundation stone was laid by her late Majesty Queen Victoria in the year 1868, and the buildings were declared open by her on their completion in 1871. The cost was approximately £600,000, a large sum, certainly, but hardly excessive when it is realised that the frontage of the edifice is no less than 570 yards in length, and that the very advantages of its position rendered necessary an adequate architectural treatment which in fact was one of the conditions of the purchase of the site.

The Hospital, the first to be built in accordance with modern ideas, consists of a series of blocks separate from each other but connected by corridors open to the air on all sides. Between the blocks are grassy quadrangles, and along the whole front is a broad terrace overlooking the river and overshadowed by trees, to which both patients and students have free access.

Six of the blocks are devoted to the use of patients, one other includes the Treasurer's Residence and the St. Thomas's Home for paying patients; one constitutes the Medical School. The wards, with the exception of four which are placed on the ground floor, occupy the first, second, and third floors. Each ward affords accommodation for 28 beds which are placed against the piers between the windows so as to secure thorough ventilation. In a small ward attached to each large one there are two beds for cases requiring special care or treatment.

The present hospital contains in all 592 beds which are distributed as follows. About 180 beds are appropriated to medical and 232 to surgical cases respectively. There are separate wards for the treatment of diseases peculiar to women (30 beds); of maternity cases (20 beds); of diseases of the eye (25 beds); of children under 6 years of age (34 beds); and for the reception of casualty cases. In one of the blocks, isolated from the rest of the establishment, there are 60 beds for infectious diseases, including tuberculosis of the lungs.

The **Maternity Ward**, containing 20 beds, affords students full facilities for maternity training, under supervision, within the precincts of the hospital. This obviates any necessity for seeking instruction elsewhere, and fully prepares the student for the extern maternity practice of the hospital district. The revised regulations of the Examining Bodies can thus be fully complied with.

The space provided for each bed in the ordinary wards is upwards of 1,800 cubic feet, and in the block appropriated to infectious diseases about 2,500 cubic feet.

There are four chief Operation Theatres for the Surgical Wards. These have impervious floors, walls and seats, and are lighted and equipped in the most modern way. There is a complete set of anæsthetizing, sterilizing, dressing and recovery rooms attached to each pair of theatres, which with the new wards are supplied by the Plenum system with filtered air. Besides these there are five other fully-equipped theatres for operations in the various departments of the Hospital.

The recent extensive structural alterations have resulted in the addition of 30 beds to the Hospital, and of a Nurses' Home affording accommodation for 185 Nurses.

During the twelve months ending December 31st, 1914, the number of patients admitted into the Hospital amounted to 9,158. In the same period, 27,357 out-patients have been treated, and in the Maternity Department, 1,013 women have been attended at their own homes. Casualties, to the number of 99,972 attendances, were treated during the same period.

The Department for Out-patients has been rearranged and is now well adapted both for the treatment of patients and for teaching purposes.

Large rooms for the use of the Physicians and Surgeons to Out-patients open directly on to the main waiting room. These are well lighted and ventilated, and are provided with ample sitting accommodation in raised tiers, so that large numbers of students can follow the methods of examination and treatment employed by the Physicians and Surgeons on duty.

There is also a series of rooms for dressing surgical cases and for the use of the various special departments. A completely fitted department for the employment of **Physical Exercises** in treatment is situate off the Main Corridor.

An Operation Theatre with modern fittings is attached to the Department for the sole use of the Out-patient Staff, their Assistants and the Directors of the various Special Departments.

The **Casualty Department** comprises a spacious receiving hall which runs the whole length of the department, and from which, on the one side, open out sorting and waiting rooms, whilst on the other are a number of smaller rooms for the examination and treatment of patients.

Isolation rooms for infectious cases are placed without the entrance.

The whole department is tiled, efficiently lighted and fitted throughout on the most modern lines. The ventilation is on the Plenum system. In connection with it there are an Accident Ward of 20 beds for the reception of urgent male cases, with a small but complete operation theatre, and two isolation rooms.

The **Ophthalmic Department** comprises a large and light Consulting Room for out-patients, a well-arranged dark room for Ophthalmoscopic examinations, and a small, fully-equipped Operating Theatre.

The **Röntgen Ray Department** has proved of such value to the Hospital that again it has been found necessary to considerably increase its accommodation and at the same time widen its scope so as to include the latest applications of electricity both for diagnosis and treatment. The department has a number of separate rooms for the application of the Finsen light treatment of lupus and other skin diseases, for electric baths for the use of high frequency and high tension currents, and for ionisation.

Tuberculosis Department.—A Tuberculosis Dispensary has been installed by the Governors of the Hospital for the systematic treatment of tuberculosis, and for instruction of students in the diagnosis and treatment of that infection, both by the use of tuberculin and by other methods. The department is in charge of a special officer, Dr. R. C. Wingfield. Attached to the Dispensary is a ward containing a small number of beds which are utilised where diagnostic methods or special lines of treatment call for closer supervision than the Dispensary affords. The resources of the X-ray department and of the Clinical Laboratory are freely used. The Dispensary is approved by the Local Government Board as part of the Borough of Lambeth Scheme for dealing with tuberculosis in the inner wards of the district, this ensures an abundant supply of cases for investigation and treatment. Students are appointed as Clinical Clerks in the Tuberculosis Department after they have completed their ordinary clerking and dressing in the hospital.

The **Hospital Laboratories** are situate on the east front. They have recently been extended and a full description of them will be found on page 20.

The **Clinical Lecture Theatre** is intended for the delivery of Clinical Lectures and Demonstrations. Its central position in

the Hospital makes it possible to illustrate the lectures by patients brought from the wards and out-patient rooms. Provision is made for the exhibition of lantern slides. The Theatre has also been specially fitted for ophthalmological, laryngological, and microscopical demonstrations. Throughout the academical year Clinical Lectures are delivered here on Medicine, Surgery, and the various special branches of study (see p. 23).

Research Ward.—In this ward research is carried out on approved subjects by the Physicians in collaboration with the heads of the various Hospital Laboratories.

An **Electro-Cardiograph** has been installed in a convenient laboratory on the Upper Main Corridor.

ADVICE TO STUDENTS ABOUT TO ENTER THE MEDICAL PROFESSION.

Registration.*—The commencement of Medical Study cannot be registered at the Office of the General Medical Council until the Student has attained the age of 16 years and has passed a Preliminary Examination in the subjects of General Education as specified in the following list:

(1) English; (2) Latin; (3) Arithmetic, Algebra, and Euclid—Books I. II., III.; (4) Either Greek, or any Modern Language.

Preliminary Examinations.—A student who has not passed such an examination is strongly recommended to pass the Matriculation of the University of London, and is advised to take Chemistry in addition to the subjects named in the foregoing list. Changes have recently been made in this examination by which the number of compulsory subjects is reduced and at the same time the range of choice widened. It possesses the great advantage of forming the first step on the road to a medical *degree*, the importance of which can hardly be over estimated. The regulations may be obtained from the Registrar, University of London, S. Kensington, S.W.

For the purpose of registration simply the Professional Preliminary Examination of the College of Preceptors is also recognised. Particulars may be obtained from the Secretary, College of Preceptors, Bloomsbury Square, W.C.

Certificates of Graduation, Matriculation, and the Local Examinations of British and Colonial Universities are accepted by the General Medical Council provided that the above-mentioned subjects be shown to have been included at one and the same time.

A student cannot be admitted to the Final Examinations until he is 21 years of age and has completed five years' study.

To students who commence their medical education in London, two alternative curricula are open: the one leads up to the Diploma of the Conjoint Board, the other to the Degrees of the University of London. The courses of study are nearly equal in length, and the arrangement of work practically the same. For the London University course, however, a higher standard is demanded, particularly in the earlier subjects of the curriculum, than for the examinations of the Conjoint Board, and while the general scheme of study in the Medical School at St. Thomas's is adapted for either career certain special classes are provided (see pages 16, 17, 18 and 27) to meet these greater requirements. The majority of medical students in London take the Diploma of the Conjoint Board even if they are members of a University as well. In fact it is wise for all to do this as the diploma is a stepping stone to certain higher qualifications.

* The Regulations of the General Medical Council with regard to Registration may be obtained from Messrs. Spottiswoode & Co., 54, Gracechurch Street, London, E.C.

CURRICULUM FOR THE UNIVERSITY OF LONDON AND FOR THE DIPLOMA OF THE CONJOINT BOARD.

First Winter Session.

Lectures. Biology, Chemistry, Physics, with Practical Work in each subject.

Examinations. Part III. (Elementary Biology) of the First Professional Examination of the Conjoint Board in March.

First Summer Session.

Lectures. Biology, Chemistry, Physics, with Practical Work in each subject.

Examinations. First Examination for Medical Degrees (Univ. Lond.), in July, or Parts I. and II. (Chemistry and Physics), of the "First Conjoint" in July.

Second Winter Session.

Lectures. Anatomy, Physiology, Anatomical Demonstrations and Dissections. Organic and Applied Chemistry for the Second Examination for Medical Degrees, Part I.

Examinations. "Vivâ voce Sessional" in December (see p. 35).

Second Examination for Medical Degrees (Univ. Lond.) (Part I.) in March.

Second Summer Session.

Lectures. Histology with Practical Work, Dissections, Organic and Applied Chemistry (for July Examination, if not already passed), Demonstrations in Practical Pharmacy, Practical Instruction in Pharmacy.

Examinations. "Sessional" (see p. 35).

NOTE.—Students are eligible to present themselves for the "Second Conjoint" on the completion of twelve months' study of Anatomy and Physiology, subsequent to passing in two of the three parts of the First Examination (*i.e.*, Physics, Chemistry, Biology). They are strongly advised to take this examination at the earliest date possible.

Third Winter Session.

Lectures. Anatomy and Physiology with Demonstrations and Dissections, Practical and Chemical Physiology. Pharmacology with Demonstrations.

"Sessional" in December and in March (see p. 35).

Examinations. Anatomy and Physiology of "Second Conjoint" in January or April.

Second Examination for Medical Degrees (Univ. Lond.) (Part II.) in March.

Third Summer Session.

Hospital Practice, Medical and Surgical, with Clerkship or Dressership. Post-Mortem Clerkship and Clerkship in Pathological Laboratory should be held at the same time as the In-patient Medical Clerkship.

Lectures. Pathology, including Practical instruction in Bacteriology; Forensic Medicine; Midwifery; and such of the subjects of the Fourth Summer Session as time and circumstances permit.

The course of instruction in Practical Medicine must be attended by Clinical Clerks, and the course of Elementary Practical Obstetrics by Clerks in the Gynæcological Department.

Part II. (Pharmacy of "First Conjoint" if not already passed.

Examinations. Second Examination for Medical Degrees (Univ. Lond.) (Part II.) in July if not already passed.

Fourth Winter Session.

Hospital Practice, Medical and Surgical.

Lectures. Medicine, Surgery, Pathology, Practical instruction in Clinical Pathology, Practical Surgery, Pharmacology, Applied Anatomy.

Clinical Clerkship with Clerkship in the Post-Mortem Room, or Pathological Laboratory (if not already held); or Dressership.

Fourth Summer Session.

Hospital Practice, Medical and Surgical, with Clerkship or Dressership. Attendance at a recognised Fever Hospital.

Pathology (continued), including Practical instruction in Bacteriology and Clinical Pathology, Forensic Medicine, Midwifery, and such of the subjects of the Fifth Summer Session as have not been completed. Lectures.

Fifth Winter Session.

Hospital Practice, Medical, Surgical, the Special Departments, and attendance at Post-mortem Examinations. Clerkship or Dressership in Special Departments. Instruction in Vaccination (Fee, one guinea and a half, p. 24).

Maternity Cases may be attended by Students who have passed the Second Examination for Medical Degrees, or the "Second Conjoint," who have attended the Lectures on Midwifery and a course of Practical Obstetrics, and who have acted as Clerks and Dressers. Maternity cases are attended in the Maternity Ward in conjunction with Clerking in the Ward for Diseases of Women. One month is spent in the Maternity Ward, and afterwards Maternity Cases are conducted for a period of two weeks in the patients' own homes in the out-district under supervision of the Obstetric House Physicians. N.B.—Clerks in the Post-Mortem Room are not allowed to attend Maternity Cases.

Pathology (if not taken in fourth winter); Medicine, Surgery, Obstetric Demonstrations; Diseases of Women: Diseases of the Eye. Clinical Lectures on Medicine and Surgery. Applied Anatomy. Lectures.

School Examinations in Medicine, Surgery, Midwifery, Pathology, Pharmacology, Forensic Medicine (including Insanity) and Public Health (see p. 35). Examinations.

Fifth Summer Session.

Hospital Practice, Medical and Surgical, and Special Departments. Midwifery, Mental Disease, Tropical Diseases, Public Health, Diseases of the Eye, Clinical Medicine, Clinical Surgery. Attendance at a Fever Hospital (if not already completed). Lectures.

Tutorial Classes in Medicine, in Surgery (including operations upon the Dead Subject), and in Midwifery.

All students are required to register their names in the Secretary's office at the commencement of each session. Attendance at lectures, demonstrations, and clinical work is also registered.

Students who have passed the "Second Conjoint," and have attended Lectures on Midwifery, and a Course of Elementary Practical Obstetrics, may enter their names for the Rota for Clerkships in the Gynæcological Ward, the Maternity Ward, and the Out-patient Department, but cannot do so whilst holding a Post-Mortem Clerkship or before they have acted as Clinical Clerks and Dressers. Examinations.

No Student is allowed to complete the Third Examination of the "Conjoint Board" until at least two years after passing the Second Examination, and five Winter and five Summer Sessions from the date of passing the Preliminary Examination.

No Candidate will be admitted to the M.B., B.S. Examination, Univ. Lond., unless he has passed in Anatomy and Physiology three years previously, and 3½ years have elapsed since matriculation, nor until the course of Study prescribed for the fourth and fifth years has been completed.

UNIVERSITY OF LONDON.

The duration of the course of study for the Qualifying Degree is 5½ years. As in the case of the Conjoint Board a year must be devoted to preparation for the First Examination for Medical Degrees (Inorganic Chemistry, Physics and General Biology), but Internal Students who matriculate in January may, under certain circumstances, enter for the examination on the lapse of seven months, *i.e.* in July.

For special courses, see page 27.

The next 18 months are devoted to study for the Second Examination for Medical Degrees, of which Part I (Organic and Applied Chemistry) can be passed not less than six months after the First Examination. Part II (Anatomy, Physiology and Pharmacology, including Pharmacy and Materia Medica) is to be passed after passing Part I, and not less than 18 months after completing the First Examination (for special courses see page 27). The Third Examination for the Medical Degrees (M.B., B.S.) can be taken not less than 3* years after passing in Anatomy and Physiology at the Second Examination, Part II, and not less than 5½ years after matriculation.

* For certain exceptions see University Regulations.

UNIVERSITIES OF OXFORD AND CAMBRIDGE.

As a rule the Students from the older Universities join the Medical School at the commencement of their fourth year, that is, after they have passed an Examination corresponding to the Second Professional of the Conjoint Board, or the Second Examination for Medical Degrees of the London University. At the end of the fourth year such Students have to present themselves for an Examination in **General Pathology** and **Pharmacology**, for which a special course of study in the Medical School is arranged (see p. 18). Preparation for this Examination may be carried on concurrently with clinical work in the Hospital Wards or Out-patient Rooms. The Final Examination for the M.B. degree corresponds in all essentials to that for the London University degree, but Cambridge Students have in addition to write a Thesis or Essay on some medical subject.

Students intending to prepare for **University Degrees and other higher Examinations** should apply to the Sub-Dean for any further information relating thereto. (For Special Courses for these Examinations see p. 27. For University Tutors see p. 13.)

During the fourth and fifth years, the greater part of the time can, and should, be given to the practical study of disease in the Wards, Out-Patient Departments, including the Special Departments (p. 23), and Post-Mortem Room, but Students are reminded that such courses of lectures as relate to Final Examinations may be with advantage re-attended.

Students when qualified should use every effort to obtain one or more of the senior appointments open to them, especially those of House Physician, House Surgeon, Obstetric House Physician, and Casualty Officer. These and other appointments, of which details are given at p. 33, afford free opportunities for obtaining practical professional knowledge which cannot be estimated too highly.

All Students are required by the Governors to conform to the Regulations of the Hospital and Medical School, and the School Council is empowered, with the approval of the Treasurer to suspend or remove a Student at any time for adequate reason.

N.B.—The Regulations for the Sessional Examinations and Prizes will be found on p. 35.

Medical and Surgical Officers of the Hospital.

Consulting Physicians.—JOHN HARLEY, M.D. Lond., SIR SEYMOUR J. SHARKEY, M.A., M.D. Oxon. T. D. ACLAND, M.A., M.D., Oxon.
Consulting Obstetric Physician.—H. GERVIS, M.D. Lond.
Consulting Ophthalmic Surgeons.—R. LIEBREICH, J. B. LAWFORD.
Consulting Anæsthetist.—WALTER TYRRELL.
Consulting Dentist.—C. E. TRUMAN, M.A. Cantab.

Physicians.	Surgeons.
H. P. HAWKINS, M.A., M.D. Oxon.	SIR G. H. MAKINS, C.B., K.C.M.G.
H. W. G. MACKENZIE, M.A., M.D. Cantab.	W. H. BATTLE.
H. G. TURNEY, M.A., M.D. Oxon.	C. A. BALLANCE, M.S. Lond., M.V.O.
J. J. PERKINS, M.A., M.B. Cantab.	H. B. ROBINSON, M.S. Lond.
	CUTHBERT S. WALLACE, B.S. Lond.

In Charge of Out Patients.

C. R. BOX, B.Sc., M.D., B.S. Lond.	E. M. CORNER, M.A., M.C. Cantab.
A. E. RUSSELL, M.D., B.S. Lond.	PERCY SARGENT, M.A., M.B., B.C.
E. F. BUZZARD, M.A., M.D., Oxon.	C. A. R. NITCH, M.S. Lond. [Cantab.
M. A. CASSIDY, M.A., M.D., Cantab.	J. E. ADAMS, M.S. Lond.

SPECIAL DEPARTMENTS.

Obstetric.—W. W. H. TATE, M.D., Lond.; J. S. FAIRBAIRN, M.A., M.B., B.Ch. Oxon. Out Patients.—J. P. HEDLEY, M.A., M.B., M.C. Cantab.
Diseases of Children (medical).—C. R. BOX, B.Sc., M.D., B.S. Lond.
Diseases of Children (surgical).—J. E. ADAMS, M.S. Lond.
Diseases of Skin.—E. STAINER, M.A., M.D. Oxon.
Urological.—C. A. R. NITCH, M.S. Lond.
Neurological.—E. F. BUZZARD, M.A., M.D. Oxon.
Electro-Cardiographic.—M. A. CASSIDY, M.A., M.D. Cantab.
Mental Diseases.—R. PERCY SMITH, M.D.
Ophthalmic.—J. H. FISHER, B.S. Lond., A. C. HUDSON, F.R.C.S.
Diseases of Nose and Throat.—W. G. HOWARTH, F.R.C.S.
Diseases of Ear.—C. A. BALLANCE, M.S. Lond.; Out Patients.—H. J. MARRIAGE, B.S. Lond.
Dental.—R. MCKAY, L.D.S.

Curator of the Museum and Pathologist.
S. G. SHATTOCK, F.R.C.S.
Director of the Hospital Laboratories and Bacteriologist to the Hospital.
L. S. DUDGEON, F.R.C.P. Lond.
Chemical Pathologist.
H. MACLEAN, M.D., Aberd., D.Sc. Lond.
Demonstrator of Morbid Anatomy.
C. R. BOX, M.D., B.S., B.Sc. Lond.
Superintendent of the X Ray Department.
A. D. REID, M.R.C.S., L.R.C.P.
Anæsthetists.
H. LOW, M.A., M.B., B.C. Cantab. E. W. HEDLEY, M.A., M.D., B.C. Cantab.
Z. MENNELL, M.B. Lond. E. V. DUNKLEY, M.D. Lond.
Supt. of the Tuberculosis Dept.
R. C. WINGFIELD, B.A., M.B., B.Ch. Oxon.
Supt. of the Physical Exercises Dept.
R. T. TIMBERG, M.R.C.S., L.R.C.P.
Consulting Chemist.
H. R. LE SUEUR, D.Sc. Lond., F.I.C.
Pharmaceutist.
J. A. JENNINGS, Ph.C.
Resident Assistant Physician.
J. L. BIRLEY, B.A., M.B., B.Ch. Oxon.
Resident Assistant Surgeon.
S. H. ROFQUETTE, M.C., Cantab., [F.R.C.S.

Registrars

Medical.	*Surgical.*	*Obstetric.*
G. HOFFMANN, B.A., M.B., B.C. Cantab.	P. H. MITCHINER, M.S., Lond., F.R.C.S.	J. M. WYATT, M.B., B.S. Lond., F.R.C.S.

Ophthalmic.—G. W. SPENCER, B.A., M.B., B.C., Cantab.

Dean of the School.
E. STAINER, M.A., M.D. Oxon.
Sub-Dean.
C. R. BOX, M.D., B.S., B.Sc. Lond.
Librarian.
G. RENDLE, M.R.C.S.
Tutors.

Oxford.	*Cambridge.*	*London.*
J. S. FAIRBAIRN, M.A., M.B., B.Ch. Oxon.	PERCY SARGENT, M.A., M.B., B.C. Cantab.	C. R. BOX, M.D., B.S., B.Sc. Lond.

Secretary to the School.
G. Q. ROBERTS, M.A. Oxon.

LECTURERS AND DEMONSTRATORS.

LECTURERS.

Biology	Dr. O'Donoghue.
Chemistry and Practical Chemistry ...	Dr. Le Sueur.
Physics	Mr. J. H. Brinkworth.
Descriptive Anatomy	Prof. Parsons.
General Anatomy and Physiology ...	Dr. J. Mellanby.
Practical Physiology and Histology ...	
Diseases of Women	Dr. Tate.
Midwifery	Dr. Fairbairn.
Applied Anatomy...	Dr. Box.
Medicine...	Dr. Mackenzie and Dr. Perkins.
Surgery	Mr. Robinson and Mr. Wallace.
Pathology and Bacteriology	Prof. Shattock and Mr. Dudgeon.
Pathological Chemistry	Dr. H. Maclean.
Forensic Medicine and Toxicology ...	Dr. E. Smith.
Pharmacology and Therapeutics ...	Dr. V. J. Woolley.
Diseases of the Eye	Mr. Fisher and Mr. Hudson.
Diseases of the Nose and Throat ...	Mr. Howarth.
Tropical Diseases...	Prof. Sandwith.
Mental Diseases	Dr. W. H. B. Stoddart.
Public Health and Sanitary Science...	Dr. H. P. Newsholme.
Clinical Medicine	The Physicians.
Clinical Gynæcology	Dr. Tate.
Clinical Midwifery	Dr. Fairbairn.
Clinical Surgery	The Surgeons.
„ „ *Ophthalmic*	Mr. Fisher and Mr. Hudson.
Comparative Anatomy...	Prof. Parsons.
Anæsthetics	Dr. Low.

TEACHERS AND DEMONSTRATORS.

Biology	Dr. O'Donoghue and Mr. W. Rushton.
Chemistry and Practical Chemistry ...	Dr. Le Sueur and Dr. Withers.
Practical Pharmacy	Mr. J. A. Jennings.
Practical Anatomy	Prof. Parsons, and Demonstrators.
Physiology and Practical Physiology...	Dr. J. Mellanby and Demonstrators.
Toxicology	Dr. J. C. Withers.
Pharmacology	Dr. V. J. Woolley.
Practical Medicine	Dr. Box, Dr. Russell, Dr. Buzzard and Dr. Cassidy.
Practical and Manipulative Surgery...	Mr. Corner and Mr. Sargent.
Operative Surgery	Mr. Robinson, Mr. Wallace and Mr. Corner.
Practical Obstetrics and Gynæcology...	Dr. Fairbairn, Dr. Hedley and Dr. Wyatt.
Electro-Therapeutics	Mr. Reid.
Electro-Cardiography	Dr. Cassidy.
Morbid Anatomy	The Demonstrators.
Morbid Histology and Bacteriology ...	Prof. Shattock and Mr. Dudgeon.
Clinical Pathology	Dr. Weir.
Diseases of the Children	Dr. Box and Mr. Adams.
„ „ *Nose and Throat* ...	Mr. Howarth.
„ „ *Skin*	Dr. Stainer.
„ „ *Ear*	Mr. Marriage.
„ „ *Teeth*	Mr. McKay.
Vaccination	Dr. Cope.
Physical Exercises	Mr. Timberg.
Tuberculosis	Dr. Wingfield.

THE MATERNITY WARD.

THE MEDICAL SCHOOL.

The School buildings, isolated by a large quadrangle from the Hospital, stand at its southern extremity, between the river and the gardens of Lambeth Palace.

THE LIBRARY AND READING ROOM.

Librarian—G. RENDLE, Esq.

The Library, which overlooks the river, is quiet, spacious and well ventilated. It has been recently completely re-arranged and re-catalogued. It contains a valuable collection of standard works, both old and new. A supply of current text-books is kept, so that a student has every inducement to fully occupy his time while in the Medical School. Many medical and scientific periodicals are taken in.

THE MUSEUMS.

Curator—Professor S. G. SHATTOCK, F.R.C.S.

The Pathological Collection contains above 3,000 preparations, and illustrates all the morbid lesions of importance met with in the various organs of the body. The present descriptive catalogue has been entirely re-written by the Curator.

The Collection includes many specimens of historical interest, such, *e.g.*, as those used by Sir A. Cooper to illustrate his works on Dislocations and Fractures, on Hernia, and diseases of the Testis; as well as two preparations showing the result of ligature of the Abdominal Aorta, and Mr. Travers's preparations exhibiting the natural process of repair of Injuries of the Intestines, and results of the experimental ligature of Arteries. The section of Fractures contains numerous examples of gun-shot injuries, obtained from cases under the care of Sir William MacCormac during the Franco-German War (1870).

From the General Collection a **Type Series** has been selected to illustrate Medical, Surgical, and Gynæcological Pathology. This series of Specimens is displayed on the ground floor of the Museum, and is furnished with a specially prepared Card Catalogue.

The Marble Bust of Morgagni in the Museum was the gift of an Italian Committee, which included the chief Professors at the various Italian Universities. It was formally presented to the Hospital by the Italian Ambassador in October, 1899.

The Collection of Comparative Anatomy comprises about 400 dissected Preparations, and in addition an equal number of osteological specimens. A large proportion of these dissections were made by Sir A. Cooper, to illustrate his Lectures, when Professor of Comparative Anatomy to the Royal College of Surgeons.

A catalogue of this Collection has been drawn up by Professor Parsons.

The Anatomical Museum in the Anatomical Department contains a large number of dissected Preparations, illustrating the individual Organs, and in addition a series of elaborate dissections.

The Materia Medica Museum contains a complete collection of the inorganic and organic substances included in the British Pharmacopœia; all these are named and numbered. A second collection of the chief medicinal substances is placed in drawers and is freely accessible to students.

The Collection of Chemical and Mineralogical Specimens is under the superintendence of Dr. Le Sueur. The majority of the specimens were presented by the late Dr. Bernays.

The Museums are open daily from 9 a.m. till 5 p.m.

LECTURES, CLASSES, & DEMONSTRATIONS.

A complete list of Lecturers and Demonstrators, p. 14.
Time-table of days and hours of Lectures, &c., p. 25, 26, 27, 28.
For Fees, see pp. 36, 37.
The attendance on all courses of Lectures is registered.

BIOLOGY (BOTANY AND ZOOLOGY.)

DR. C. H. O'DONOGHUE, WITH MR. W. RUSHTON.

THE BIOLOGICAL LABORATORY is in the West Wing, and is admirably adapted to its purpose.

Courses of Lectures, including Practical Work, are held during the Winter and Summer Sessions in preparation for the First Examination for Medical Degrees, Univ. Lond. and for other University Examinations (see pp. 25, 26, 27).

A six months' practical course to meet the requirements of the "Conjoint Board" is held from October to March, and a revision class from May to July.

CHEMISTRY.

DR. LE SUEUR.

THE CHEMICAL DEPARTMENT is complete in itself. In addition to large laboratories for class purposes there are private ones for advanced and research work. The department has its own lecture theatre, opening out of one of the laboratories.

A systematic Course of LECTURES on Inorganic, Organic and Physical Chemistry is given during the Winter and Summer Sessions. These lectures are fully illustrated by experiments, and are supplemented by a course of tutorial classes held by the demonstrator.

Courses of practical instruction in Chemistry as required for the First and Second Examinations for Medical Degrees (Univ. Lond.), and for the Examinations of the Conjoint Board, extend over the Winter and Summer Sessions. (See pp. 25, 26, 27.)

A special course of Practical Instruction is given in the Laboratory to Candidates for Diplomas in Public Health.

Arrangements may be made for additional Practical Work (Elementary and Advanced) in the Chemical Laboratory at fees which may be ascertained from the Medical Secretary.

PHYSICS.

MR. J. H. BRINKWORTH.

There is a SPECIAL PHYSICS LABORATORY which is adequately provided with apparatus for practical work.

Courses of Lectures, fully illustrated by experiment, are given during the Winter and Summer sessions, and are especially adapted to the requirements of the First Examination for Medical Degrees (Univ. Lond.), and the first Professional Examination of the Conjoint Board. (See pp. 25, 26, 27.)

The lectures are supplemented by Tutorial and Practical Classes.

ANATOMY.

PROFESSOR PARSONS.

THE DISSECTING ROOM which is unusually large, is well lighted and ventilated. Private rooms are provided for the Prosectors and Demonstrators.

A LECTURE THEATRE, with seating accommodation for 200 Students renders the department complete.

A valuable collection of Dissected Specimens, Anatomical Models, Diagrams, Illustrations and Stereoscopic Photographs, which form the contents of the Anatomical Museum, are available for the purposes of study.

LECTURES.—A six months' course, consisting of five lectures a week, is given during the Winter Session. As certain portions of the subject are dealt with more fully in alternate years, students are required to attend the course both in their second and third years.

The lectures are illustrated by fresh dissections and preparations.

TUTORIAL CLASSES, conducted partly by examination, partly by demonstration, are held daily during the Sessions.

A Course of special demonstrations of Surface Anatomy is given during the Summer Session, and, during the Winter Session, a course of lectures on the Application of Anatomy to Medicine and Surgery.

PRACTICAL.—During both Winter and Summer Sessions the dissecting room is open for the use of students, and the demonstrators attend daily. A number of stock preparations are displayed in the room, and the others are preserved for use in the tutorial classes.

Tutorial classes are held prior to the January, March and July examinations of the "Conjoint Board," which all candidates are allowed to attend. A verbal test examination is held three weeks prior to the examinations, at which candidates must satisfy the teachers as to their knowledge before obtaining the necessary signatures to their schedules.

Special classes are held by the lecturer and demonstrators for the various University Examinations, as well as for the Primary Fellowship of the College of Surgeons in May and November. For the November Examination classes begin in July. No additional fee for these classes is charged to Students paying the Annual Composition Fee (see pp. 36, 37).

APPLIED ANATOMY.

DR. BOX.

A course of lectures on Applied Anatomy is given during the first half of the Winter Session. It is illustrated by Lantern Slides and Models, and may be attended by Students in their third, fourth, or fifth years.

PHYSIOLOGY.

DR. J. MELLANBY.

THE PHYSIOLOGICAL DEPARTMENT is constructed on similar lines to the chemical, with large class laboratories, research laboratories and full equipment in the way of apparatus.

LECTURES.—A systematic course of lectures is given throughout the Winter and Summer Sessions. As certain portions of the subject are dealt with more fully in some years than in others Students are required to attend the course both in the second and third years.

ELEMENTARY PRACTICAL PHYSIOLOGY. An elementary practical class for second year Students is held in the first half of the Winter Session. An elementary course of Chemical Physiology, also for second year Students, is given in the second half of the Winter Session.

HISTOLOGY.—A practical class in Histology is held three mornings a week during the Summer Session, and is attended by second year Students. Each Student is practically instructed in the methods of preparing histological specimens.

Each Student for the purposes of this class must provide himself with a microscope, slides and cover glasses, drawing-book and pencils, box to hold twelve dozen specimens, forceps, scalpel, scissors, section-lifter, mounted needles, and six watch glasses.

A table, cupboard and drawer, chemicals, staining and mounting fluids, &c., are provided for him. A deposit of 5*s.* is charged for the use of a key and apparatus, and this is repaid at the end of the course if both are returned in proper order.

Tutorial Classes in Physiology are held by the Demonstrators prior to the January, April, and July examinations of the "Conjoint Board."

Advanced Practical Physiology.—A Class in advanced *practical* Physiology is held twice a week from October to March and consists of two parts. The first half of the course is devoted to the use and study of those instruments and experiments which are fitted to class work. The second half is a course of advanced Chemical Physiology. During this class, demonstrations are given of many experiments which cannot be carried out by the Students themselves. This class is intended for those preparing for University Examinations (Cambridge, London, Oxford), or for the Fellowship of the College of Surgeons.

Special Tutorial Classes are held by the Lecturer and Demonstrators for the various University Examinations, as well as for the Primary Fellowship of the College of Surgeons in May and November. For the November Examination classes begin in July. No additional fee for these classes is charged to Students paying the Annual Composition Fee (see pp. 36, 37).

PHARMACY, PHARMACOLOGY, AND THERAPEUTICS.

Dr. V. J. WOOLLEY and Mr. JENNINGS.

The Materia Medica Museum contains a complete collection of the inorganic and organic substances included in the British Pharmacopœia; all these are named and numbered. A second collection of the chief medicinal substances is placed in drawers and is accessible to students.

Lectures and Demonstrations are given during the Winter Session, the course being specially adapted to the requirements of candidates for the examinations of the Universities of London, Oxford and Cambridge, and the "Conjoint Board."

Demonstrations of Materia Medica are given in the Materia Medica Museum by Mr. Jennings and two assistants.

A special course of Lectures and Demonstrations in Pharmacology and Elementary Pathology is held for Cambridge and London Examinations in these subjects.

Practical Pharmacy.—Instruction in Practical Pharmacy and Dispensing (see p. 36) as required by the Universities of London, Oxford, and Cambridge and the "Conjoint Board," is given by the Hospital Pharmaceutist, Mr. Jennings. In addition, special classes are held in Pharmaceutical Chemistry to meet the requirements of the first M.B. of Oxford (Practical Exam. in Materia Medica and Pharmacology) and the third M.B. of Cambridge.

DISEASES OF WOMEN AND MIDWIFERY.

Dr. TATE and Dr. FAIRBAIRN.

Dr. Tate delivers a course of Lectures on Diseases of Women during the second half of the Winter Session.

A systematic course of lectures on Midwifery is delivered by Dr. Fairbairn during the Summer Session, embracing the physiology and pathology of pregnancy, labour, and the puerperal state, preceded by an account of the anatomy and development of the female pelvis, and of the placenta and fœtal membranes.

A course of Obstetric Demonstrations on the model is given three times a year by Dr. Hedley.

For Practical Midwifery (see pp. 23 and 24).

Tutorial Classes are held prior to the January, April, and July Examinations of the "Conjoint Board." (See p. 22.)

CLASSES FOR CLERKS AND DRESSERS.

An elementary course of practical instruction in the means of physical diagnosis is held three times a year; no student can be appointed Clinical Clerk unless he attends this class, or an equivalent course elsewhere. Instruction is given in the principles and method of examination of the circulatory, respiratory, urinary, digestive, and nervous systems.

Demonstrations in Surgical Technique and Bandaging are given by the Surgical Registrar to the surgical dressers. No dresser can be appointed unless he attends this Class.

MEDICINE.

A systematic course of lectures on the Principles and Practice of Medicine is given during the Winter Session. The subject being too extensive for a six months' course, students should attend during two Winter Sessions. The lecturers are Dr. Mackenzie and Dr. Perkins.

Clinical lectures on Medicine are given once a week throughout the Academic year, by the physicians to the Hospital in rotation.

Special lectures on Medical subjects by Members of the staff are delivered periodically in the Clinical Lecture Theatre.

The subject of each lecture is advertised beforehand in the Hospital and Medical School.

Tutorial Classes are held prior to the January, April, and July Examinations of the "Conjoint Board." (See p. 23)

SURGERY.

A systematic course of lectures on General and Special Surgery is given three times weekly throughout the Winter Session. The subject, being too extensive for a six months' course, is spread over more than one Winter Session. The lecturers are Mr. Robinson and Mr. Wallace.

Clinical lectures on Surgery are given once a week throughout the Academic year, by the Surgeons to the Hospital in rotation.

Special lectures on Surgical subjects by Members of the staff are delivered periodically in the Clinical Lecture Theatre.

The subject of each lecture is advertised beforehand in the Hospital and Medical School.

Special classes are held before each Examination for the Final F.R.C.S. (See p. 37.)

Tutorial classes are held prior to the January, April, and July examinations of the "Conjoint Board." These include general surgery, operative surgery, and surgical anatomy, by Members of the Surgical Staff; and surgical pathology, by Professor Shattock (see p. 23).

PRACTICAL SURGERY.

During the Winter Session a class is held once a week, providing special instruction for students holding Out-patient dresserships. The first half of the course comprises the use of trusses and splints, the treatment of wounds and hæmorrhage, and the demonstration of surgical landmarks on the living model. (Mr. Sargent.)

The second half includes the diagnosis and treatment of fractures and dislocations. (Mr. Corner.)

The teachers of practical surgery are assisted by Demonstrators, who supervise the students after each lecture in the various manipulations on the living models provided.

OPERATIVE SURGERY.

Classes are held previous to the January, April, and July examinations of the "Conjoint Board." The operations are performed by the students, subjects being provided at the expense of the school.

Special classes in Advanced Operative Surgery commence on the third Monday in October, and on the second Monday in April, for students preparing for the higher examinations. (See p. 37.)

PATHOLOGY AND BACTERIOLOGY.

Lecturers on General Pathology—
Prof. S. G. SHATTOCK, F.R.C.S. and L. S. DUDGEON, F.R.C.P.

Lecturer on Special Pathology—
L. S. DUDGEON, F.R.C.P.

Lecturer on Bacteriology—
Prof. S. G. SHATTOCK, F.R.C.S.

Lecturer on Pathological Chemistry—
H. MACLEAN, M.D. Aberdeen, D.Sc. London.

Demonstrators of Morbid Anatomy—
C. R. BOX, M.D., F.R.C.S., F.R.C.P.

Demonstrator of Clinical Pathology—
H. B. WEIR, M.A., M.B., B.C.

Two Research Assistants.

THE PATHOLOGICAL DEPARTMENT includes two large suites which are under the supervision of the Director of Hospital Laboratories.

Of these Laboratories one occupies the West Wing of the Medical School Buildings. It is known as the **Hospital Laboratory of Pathology**, and was established by the Governors for extended investigations of the material derived from the post-mortem room of the Hospital. Attached to the main Laboratory are subsidiary work-rooms, and the whole is completely equipped for all purposes of investigation.

In this suite of Laboratories and in the Class Laboratory above Students are practically instructed in pathological histology and elementary bacteriology.

A second and very extensive range of Laboratories is situate on the East face of the Hospital itself. These, which are of more recent construction, comprise the following units :—

1. **The Louis Jenner Laboratory of Clinical Pathology,** which was established in 1897 and bears the name of its first Superintendent. This is utilised for the purpose of such pathological investigations as may throw light on the condition of patients in the wards.

2. **The Bacteriological Laboratories,** which are an extension of the foregoing and are utilised for the purposes of vaccine treatment both of in and out-patients.

3. **The Laboratory of Chemical Pathology,** instituted in the year 1912 and devoted to the investigation of the chemical phenomena of diseased conditions.

4. **The Research Laboratory,** which is worked under the control of a Research Committee and is devoted to the purposes of Research by Members of the Staff, with the help of Research Assistants. The object of this Laboratory is to exploit the scientific side of Medicine and further the scientific education of the Students.

The POST MORTEM ROOM AND MORTUARY are provided with Refrigerating Apparatus and ventilated by the electric fan.

THE PATHOLOGICAL COLLECTION contains above 3,000 preparations, and illustrates all the morbid lesions of importance met with in the various organs of the body. The preparations are selected, arranged and catalogued

with the object of enabling the student to become familiar with the essentials of Pathological Anatomy.

The course of instruction in Pathology consists of the following Lectures, Demonstrations and Practical Classes:—

1. Lectures on General Pathology given twice a week during the Winter Session by Prof. Shattock and Mr. Dudgeon.

2. Lectures on Morbid Anatomy, illustrated by specimens, given once a week during both Winter and Summer Sessions by Mr. Dudgeon.

3. Lectures dealing with the bearing of Pathological Chemistry on Clinical Problems, given during the first half of each Winter Session.

4. Demonstrations of Pathological Histology given during the Winter Session by Prof. Shattock.

*5. A course of Practical Bacteriology held during the Summer Session by Prof. Shattock.

*6. A clerkship for three months in the Post-mortem room.

*7. A clerkship for three months in the Pathological Laboratory attached to the Post-mortem room (5 and 6 may run concurrently).

8. A further clerkship for advanced Students in the Clinical Laboratory of the Hospital, so far as accommodation may permit.

9. Two senior clerkships in Practical Bacteriology and Vaccine Therapy. Appointments to these may be made every three months.

*10. A series of Demonstrations of Clinical Pathology given by the Demonstrator three times a year, *i.e.* in each half of the Winter Session, and also in the Summer Session.

11. Demonstrations of Morbid Anatomy, for the purpose of revision, before the final examinations.

12. A special course in Elementary Pathology and Pharmacology for University Students

Post-Mortem Examinations are performed daily at 2 p.m., except Saturdays when they are at 10 a.m. Students are appointed to act as clerks, and make the examinations under the supervision of the pathologists. Arrangements are made whereby Students are enabled to follow the post-mortem work of the Hospital without interfering with their clinical work in the Wards and Out-patient Department.

The courses of *practical* instruction marked thus * are compulsory under the Conjoint Board Schedule.)

N.B.—For the Diploma of Public Health the Bacteriological Course is followed by a more detailed study of such Pathogenic organisms as those of Typhoid, Cholera and Diphtheria; the examination of infected animals; and the Bacterial examination of water, air, and soil.

FORENSIC MEDICINE AND TOXICOLOGY.

Dr. EDWIN. SMITH

and the Demonstrator of Toxicology.

A three months' course of lectures is given during the Summer Session by Dr. E. Smith.

The lectures cover the synopses of the various Examining Boards, and are supplemented in the toxicological section by demonstrations by Dr. Withers.

At the end of the Winter Session a couple of lectures on Medical Ethics are delivered by Dr. W. S. Colman.

MENTAL DISEASES.

Dr. W. H. B. STODDART.

A three months' course of lectures is given during the Summer Session, comprising Causation, Symptomatology, Classification, States and Forms of Disease, Pathology and Treatment. Lunacy Law.

FORMS OF INSANITY.

Elementary Psychology — normal and morbid. Maniacal-Depressive Insanity. Paranoia. Dementia Praecox. Acute Confusional Insanities. The Organic Psychoses. General Paralysis. Senile Psychoses. Neurasthenia. The Anxiety Neurosis. Hysteria. Psychasthenia. Psycho-analysis and the Unconscious. Congenital mental deficiency (Idiocy and Imbecility). The Legal relations of Insanity.

Clinical Instruction is given by visits to Bethlem Royal Hospital, or other asylums, on Saturdays at 11 a.m. during the Summer Session, and also by Dr. Percy Smith in the Out-Patient department at St. Thomas's Hospital, on Tuesdays at 10 throughout the year.

TROPICAL DISEASES.

PROFESSOR SANDWITH.

A course of lectures is given during the Summer Session, commencing the first week in May. The lectures are on Wednesdays at 4.30. The subjects are selected from the following syllabus: Malaria, Mediterranean Fever, Dengue, Cholera, Dysentery, Beri-beri, Plague, Pellagra, Bilharziasis, Ankylostomiasis, Leprosy.

DISEASES OF THE EYE.

MR. FISHER AND MR. HUDSON.

A course of lectures is given by Mr. Fisher during the first half of the Winter Session. Occasional demonstrations of cases are also given. Clinical lectures or demonstrations of cases are given during the Summer Session.

An elementary class for learning the use of the Ophthalmoscope is held in October, January, and May.

A special class for Instruction in Refraction is attended by the dressers on their appointment.

Oral classes and demonstrations are held in connection with the Surgical tutorial classes for the examinations of the "Conjoint Board."

A Special Course of operations on the dead subject is given by Mr. Fisher.

DISEASES OF THE NOSE AND THROAT.

MR. HOWARTH.

A course of lectures on this subject is delivered during the second half of the Winter Session, and Clinical Lectures are given occasionally.

PUBLIC HEALTH.

DR. H. P. NEWSHOLME.

A course of lectures is given during the Summer Session, dealing with:—

Water, Air, Soil, Food, the Dwelling in relation to Health and Disease—Infectious and Epidemic Diseases, the principles of preventive measures—Quarantine, Port Sanitary Administration, Isolation—Hospitals, temporary or permanent—Provisions of the Act for Notification of Diseases—The principles of Disinfection and the mode of action of the chief disinfecting agents—Vaccination—Statistics in relation to public health—Statutes relating

to public health—The powers and duties of Sanitary Authorities and their officers—Water Supply, Drainage, Sewerage, the disposal of sewage and excreta by methods adapted to either town or country districts—Trades regulated under the Factory and Public Health Acts.

The lectures may be supplemented by Public Health demonstrations, relating to water supply, systems of sewage disposal and purification, establishment and organization of Isolation Hospitals, house drainage, schools, workhouses and other institutions, Dairy Sanitation, etc. Contagious Diseases (Tuberculosis) Animals' Act.

St. Thomas's Hospital Medical School is one of the institutions recognised by the Universities of Oxford, Cambridge, and London, and the Royal Colleges of Physicians and Surgeons for Laboratory instruction in Public Health.

TUTORIAL CLASSES.

All students are specially prepared for examinations in the final subjects of Medicine, Surgery, and Midwifery, by a system of Tutorial Classes. These are held three times a year in each subject, and last for eight weeks before each examination. Each course consists of from twenty-five to fifty classes. The classes are mostly conducted by Members of the Hospital Staff, and their chief object is to prepare students for *viva voce* Examination.

HOSPITAL PRACTICE.

CLINICAL TEACHING OF MEDICINE AND SURGERY.

CLINICAL INSTRUCTION is given daily by the Physicians and Surgeons during their visits to the Wards, and by the Physicians and Surgeons in the Out-Patient Departments, as set out in the Time Table on p. 28.

SERIES OF SPECIAL LECTURES.

Short Courses of Lectures on Advanced Medical Subjects are given throughout the year. Special Notices of these are posted on the Notice Boards.

CLINICAL LECTURES.

CLINICAL LECTURES are given on Wednesdays throughout the sessions each lecture being, so far as possible, illustrated by cases. They include a series of lectures or demonstrations given in connection with the Special Departments. The times and subjects of all Clinical Lectures are announced beforehand on the notice boards. To comply with the regulations of the Conjoint Examination Board these lectures must be attended during a period of nine months. Attendance at the lectures is registered.

CLINICAL APPOINTMENTS.

CLINICAL CLERKS and DRESSERS to In-patients are appointed every three months. The In-Patient Dressers go on Accident Duty in rotation. The DRESSER on Accident Duty is provided with a Room and Commons in the Hospital.

CLINICAL CLERKS and DRESSERS for the Out-patients are also appointed at the same intervals.

Applicants for Clinical Appointments are required to have passed the 2nd examination of the Conjoint Board, or an equivalent examination. All Clinical Clerks must attend a course of instruction in Elementary Clinical Medicine (p. 19). Dressers must attend Classes in Practical Surgery (p. 19), the Lecture on Anæsthetics and the Classes held for them by the Surgical Registrar. (*The Duties of all Clerks and Dressers commence on the third Tuesday in January, April, July, and October.*)

CLINICAL CLERKS TO THE ANÆSTHETISTS are also appointed to hold office for three months. They must have attended the preliminary lecture on Anæsthetics and Anæsthetic Apparatus by Dr. Low.

CLINICAL CLERKS IN THE GYNÆCOLOGICAL AND MATERNITY DEPARTMENTS are appointed every three months. For half this time they are attached to Dr. Tate in the Gynæcological Ward, and for the other half to Dr. Fairbairn in the Maternity Ward and the Out-door Maternity District. They are also expected, whenever possible, to attend the Out-Patient Department for Diseases of Women under charge of Dr. Fairbairn and Dr. J. P. Hedley.

The Clerks are appointed, in rotation, from a list of Students who have entered their names for the purpose, have attended Lectures on Midwifery and have held the offices of Clinical Clerk and Dresser. They must attend the classes in Elementary Practical Obstetrics. Certificates are awarded to those Gentlemen who have satisfactorily attended Sixty Maternity cases. An allowance is made towards the cost of board and lodging.

Appointments in the SPECIAL DEPARTMENTS of the Hospital must be held by all students who have finished their terms as In- and Out-patient Clerks and Dressers, otherwise they cannot be considered as attending Hospital Practice or receive the necessary signatures to that effect.

Clinical Clerks are also appointed to the Tuberculosis Department.

SPECIAL DEPARTMENTS.

Diseases of Women.—Clinical instruction is given in Adelaide Ward on Tuesdays and Fridays at 2 p.m., and in the Casualty and O. P. Department on Mondays and Wednesdays at 1.30 p.m. and on Fridays at 9.30 a.m.

Midwifery.—A Maternity Ward of 20 beds is available for teaching purposes. This enables University Students to comply with the new regulations of the Examining Bodies without going to a Special Hospital. All Students will receive one month's training in the Ward before attending confinements in the district. Clinical Instruction is given on Mondays at 1.30 p.m. and on Tuesdays at 2 p.m.

A maternity department, under the supervision of the Obstetric Physician to out-patients, is connected with the hospital, women being attended in confinement at their own homes by students of the hospital (p. 34).

Medical and Surgical Diseases of Children.—Clinical Instruction is given in the Out-Patient Rooms on Wednesdays and Saturdays at 10 a.m.

Neurological Out-Patients.—Neurological cases are demonstrated by Dr. Buzzard in the Eye Department every Saturday morning at 10 o'clock.

Diseases of the Eye.—Patients are seen and Clinical Instruction afforded in the Out-Patient rooms daily at 2 p.m., except Saturday, and in the Ophthalmic Ward, on Wednesdays at 10 a.m., October to December excepted; during these months the systematic lectures on Ophthalmology are delivered. (Time Table p. 29). Clinical Lectures and Ophthalmoscopic Demonstrations are also given.

Diseases of the Skin.—Clinical instruction on Tuesdays at 2 p.m., Wednesdays at 11 a.m., and Fridays at 2 p.m. Wednesday mornings are devoted to children.

Diseases of the Nose and Throat.—Clinical instruction on Wednesdays at 2 p.m. and Fridays at 9.30 a.m.

Diseases of the Ear.—Clinical instruction on Mondays and Thursdays at 2 p.m.

Mental Diseases.—Clinical instruction on Tuesdays at 10 a.m. in the Out-Patient department, and also at 11 a.m. on Saturdays during the Summer Session at Bethlem Royal Hospital.

Diseases of the Teeth.—The Dental Surgeon gives instruction in Dental Surgery on Mondays, Tuesdays, Thursdays, and Fridays at 9 a.m.

Vaccination is taught practically at the Hospital by Dr. COPE, on Tuesdays at 10.30 a.m., who is authorised by the Local Government Board to give certificates of proficiency. (Fee, see p. 37).

X-Rays and Electro-Therapeutics.—Instruction is given on Mondays, Wednesdays and Fridays at 2 p.m.

Vaccine Treatment is administered in the Special Laboratory from 10-12 daily, Saturdays excepted.

Physical Exercise.—Instruction is given in the Department on Mondays, Wednesdays and Fridays at 1.30 p.m.

Tuberculosis Department.—Mondays, Women 10 a.m.; Tuesdays, Men 10 a.m., Women 4.30 p.m.; Wednesdays, Women 10 a.m.; Men 8 p.m.; Thursdays, Men 10 a.m.; Fridays, Men 10 a.m. Clinical instruction every Wednesday at 3 p.m.

Urological Department.—Daily at 5 p.m. Clinical Instruction on Fridays at 5 p.m.

For further appointments, open to Qualified Students, see page 33.

DAYS AND HOURS OF LECTURES AND DEMONSTRATIONS.

WINTER SESSION.

FIRST YEAR.

		Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Biology, p. 16 Dr. O'Donoghue and Mr. Rushton	Lectures	2–3	9½–10½	—	9½–10½	—	—
	Practical Work	3–5	10½–12	—	10½–1		
	Revision		—	—	—	—	9½–10½
Chemistry, p. 16, Dr. Le Sueur & J. C. Withers, Ph.D.	Lectures	12–1	—	12–1	—	12–1	—
	Practical Work	10–12	—	—	2—5	—	—
	Revision (Jan.-Mar.)	—	—	11–12	—	—	—
Physics, p. 16, Mr. Brinkworth	Lectures	—	12–1	—	—	10–11	—
	Practical Work	—	—	—	—	2—5	—
	Tutorial	—	—	—	—	11–12	—
	Revision	—	—	10–11	—	—	—

SECOND AND THIRD YEARS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Descriptive Anatomy, p. 16, Prof. Parsons	9.30	9.30	9.30	9.30	9.30	—
Anatomical Demonstrations, p. 17, Prof. Parsons and Demonstrators	10½–4½	10½–4½	10½–4½	10½–4½	10½–4½	10½–1
Revision Classes	2—3	12–1	2—3	12–1	2—3	—
Physiology, p. 17, Dr. J. Mellanby, Lecture	10.45	—	10.45	—	10.45	—
Practical Physiology, p. 17	—	—	11.45	—	11.45	—
Revision Classes	4½–5½	4½–5½	—	4½–5½	—	—
Pharmacology, p. 18 Dr. Woolley, Lecture (Oct.-Dec.)	5	—	—	5	—	—
Demonstration (Jan.-Mar.)	—	—	—	4	—	—

FOURTH YEAR.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Medicine, p. 19						
Dr. Mackenzie, 2nd & 4th six weeks	—	12.30	12.30	—	—	—
Dr. Perkins, 1st & 3rd six weeks.....	12.30	—	12.30	—	—	—
Surgery, p. 19						
Mr. Robinson, 1st and 3rd six weeks / Mr. Wallace, 2nd and 4th six weeks	9	—	—	9	—	—
General Pathology and Bacteriology, p. 20 ... Prof. Shattock	—	—	—	12.30	12 Micro. Dem.	—
Mr. Dudgeon	12 2nd six weeks.	12 1st six weeks.	—	—	—	—
Special Pathology, Mr. Dudgeon	—	—	—	—	—	11.30*
Chemical Pathology, Dr. MacLean (Oct.-Dec.)	—	5	—	—	—	—
Pathological Demonstrations (In the Post-Mortem Room)	2	2	2	2	2	10
Diseases of the Eye, Mr. Fisher (Oct.-Dec.)	—	—	9	—	—	—
Pharmacology and Therapeutics, p. 18						
Dr. V. J. Woolley, Demonst. (Jan.-Mar.)	—	—	—	4	—	—
,, ,, ,, ,, Lecture (Oct.-Dec.)	5	9	—	—	—	—
Practical Surgery, p. 19. Mr. Sargent (Oct.-Dec.)	—	—	—	—	9	—
Mr. Corner (Jan.-March)	—	9	—	—	—	—
Applied Anatomy, p. 17, Dr. Box (Oct.-Dec.)	—	—	4.30	—	—	—
Rhinology and Laryngology, Mr. Howarth (Jan.-March)	5	—	—	—	—	—

* NOTE.—The Pathological demonstration on Saturday follows the lecture and is partly on the post-mortem material of the week and partly in illustration of the lecture. It is both microscopical and macroscopical.

FIFTH YEAR.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Medicine, p. 19						
Dr. Mackenzie, 2nd and 4th six weeks ...	—	12.30	12.30	—	—	—
Dr. Perkins, 1st and 3rd six weeks.....	12.30	—	12.30	—	—	—
Surgery, p. 19						
Mr. Robinson, 1st and 3rd six weeks / Mr. Wallace, 2nd and 4th six weeks	9	—	—	9	—	—
Diseases of Women, p. 18, Dr. Tate, Jan., Feb., Mar.	—	—	9	—	9	—
Diseases of the Eye, p. 22						
Mr. Fisher (Oct.-Dec.).....	—	—	9	—	—	—
Applied Anatomy, p. 17, Dr. Box (Oct.-Dec.)	—	—	4.30	—	—	—
Rhinology and Laryngology, Mr. Howarth (Jan.-March)	5	—	—	—	—	—

SUMMER SESSION.

FIRST YEAR.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Biology, p. 16, Dr. O'Donoghue & Mr. Rushton — Lectures	—	2—3	—	12—1	—	—
Practical Work ...	—	3—5	—	9½—12	—	—
Chemistry, p. 16 — Lectures	12	—	—	—	—	—
Dr. Le Sueur & J. C. Withers, Ph.D. — Practical Work ...	2—5	—	—	2—5	—	—
Revision	—	—	10—11	—	—	—
Physics, p. 16, Mr. Brinkworth — Lectures	—	12—1	—	—	9½—10½	—
Practical Work ...	—	9—12	—	—	—	—
Tutorial	—	2—3	—	—	10½—12	—
Revision	—	—	9—10	—	—	—

For Time Tables of the Classes for Examination at the University of London, see pages 27 and 28.

SECOND AND THIRD YEARS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Materia Medica Demonstrations, p. 18. Mr. Jennings	11	—	—	—	2	—
Practical Instruction in Dispensing, p. 18. Mr. Jennings	10	—	—	—	10	—
Physiology, p. 17. Dr. J. Mellanby, Lectures	—	9	9	9	—	—
Physiology, p. 17. Dr. J. Mellanby, Histology	—	10—12	10—12	10—12	—	—
Physiology, p. 17. Dr. J. Mellanby, Revision	—	12—1	12—1	12—1	—	—
Anatomical Demonstrations, p. 17. Prof. Parsons and Demonstrators	11—4	11—4	11—4	11—4	11—4	11—1

THIRD, FOURTH AND FIFTH YEARS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Midwifery, p. 18, Dr. Fairbairn	—	9	9	9	9	—
Special Pathology and Bacteriology, p. 20, Mr. Dudgeon	—	—	—	—	4	—
Practical Bacteriology, p. 20, Prof. Shattock (in June)	12	—	12	—	—	—
Forensic Medicine, p. 21, Dr. Edwin Smith	4.30	—	—	4.30	—	9
Toxicology, Dr. Withers	—	12	—	—	—	—
Mental Diseases, p. 21, Dr. W. H. B. Stoddart, Lecture	—	—	—	12	—	—
Mental Diseases, p. 21, Dr. W. H. B. Stoddart, Asylum Visit	—	—	—	—	—	11—1
Tropical Diseases, p. 22, Prof. Sandwith (May and June)	—	—	4.30	—	—	—
Public Health, p. 22, Dr. H. P. Newsholme	—	—	—	—	12	—
Diseases of the Eye, p. 22, Mr. Fisher and Mr. Hudson	—	As announced	—	—	—	—

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR MEDICAL DEGREES.

		Mon.	Tues.	Wed.	Thu.	Fri.	Sat.
Chemistry. H. R. LE SUEUR, D.Sc. Lond. and J. C WITHERS, Ph. D.	Lectures (Winter)	12-1	—	12—1	—	12 1	—
	,, (Summer)	—	—	9—10	—	—	—
	Practical Work (Winter)	10-12	—	—	2 5	—	10 1
	,, (Summer)	10 1	—	—	2 5	—	—
	Revision (Winter)	—	—	10 11	—	—	—
	,, (Summer)	—	—	11 12	—	—	—
Physics. J. H. BRINKWORTH, B.Sc. Lond.	Lectures (Winter)	—	12—1	—	—	10—11	—
	,, (Summer)	—	12—1	—	—	9½ 10½	—
	Practical Work (Winter)	—	2–5	—	—	—	—
	,, (Summer)	—	3 6	—	—	—	—
	Tutorial (Winter)	—	—	—	—	11 12	—
	,, (Summer)	—	2–3	—	—	10½ 12	—
	Revision (Winter)	—	—	11 12	—	—	—
	,, (Summer)	—	—	10 11	—	—	—
Biology. DR. O'DONOGHUE and MR. RUSHTON.	Lectures (Winter & Summer)	2—3	9½ 10½	—	9½ 10½	—	—
	Practical Work (Winter & Summer)	3—5	10½ 12	—	10½ 1	—	—
	Revision (Winter)	—	—	—	—	—	9½ 10½
	,, (Summer)	—	—	—	—	—	—

N.B.—A microscope and simple Dissecting Apparatus must be provided by each Member of the Class.

SECOND EXAMINATION FOR MEDICAL DEGREES.—Part I.

SECOND WINTER (ALSO SUMMER IF REQUIRED).

		Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
Organic and Applied Chemistry. H. R. LE SUEUR, D.Sc. Lond. and J. C. WITHERS, Ph. D.	Lectures (Winter)	—	12.0	—	12.0	—	—
	Revision (Winter)	—	—	—	—	2.0	—
	Practical Work (Winter)	—	2–5	—	—	3–5	—

SECOND EXAMINATION FOR MEDICAL DEGREES.—Part II.

		Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
Anatomy. PROFESSOR PARSONS, and Demonstrators.	Lectures (Winter)	9.30	9.30	9.30	9.30	9.30	—
	Special Classes			Daily			
	Dissections			Daily			
Physiology. J. MELLANBY, M.D. and Demonstrators.	Lectures (Winter)	10.45		10.45		10.45	—
	,, (Summer)	—	9.0	9.0	9.0	—	—
	Practical Work (Win.)	—	10.45	11 45	10.45	11.45	—
	,, (Sum.)	—	10–12	10–12	10–12	—	—
	Revision (Winter)	4½–5½	4½ 5½		4½–5½	—	—
	,, (Summer)	—	12–1	12 1	12–1	—	—
Pharmacology. V. J. WOOLLEY, M.A., M.D. Cantab.	Lectures (Oct.—Dec.)	5.0	9.0			—	—
	Demonstrations (Jan. Mar.)	—	—	—	4.0	—	—
Practical Pharmacy and Materia Medica. J. A. JENNINGS, Ph.C.	Practical Work (Sum.) (Dispensing)	10.0	—	—	—	10.0	—
	Demonstration (Jan.—Mar.)	—	—	2.0	—	—	—

ATTENDANCE BY THE PHYSICIANS AND SURGEONS IN THE WARDS.

Special Clinical Teaching is given at the hours marked in heavy type.

	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
DR. HAWKINS	2	—	—	2	—	—
DR. MACKENZIE	—	2	—	—	2	—
DR. TURNEY	2	—	—	—	10	—
DR. PERKINS	—	2	—	—	2	—
DR. TATE	—	2	—	—	2	—
DR. FAIRBAIRN (Lying-in Ward)	1.30	—	—	2	—	—
SIR G. H. MAKINS	—	2	—	—	—	—
MR. BATTLE	—	2	—	—	2	—
MR. BALLANCE	—	2	—	2	—	—
MR. ROBINSON	2	10	—	—	—	—
MR. WALLACE	2	—	—	2	—	—
MR. FISHER	2	—	10	2	—	—
MR. CORNER (Block VIII)	—	—	2	—	—	—

ATTENDANCE IN THE OUT-PATIENT DEPARTMENT

Special Clinical Teaching is given at the hours marked in heavy type.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
DR. RUSSELL	—	1.30	—	—	1.30	—
DR. BUZZARD	—	—	1.30	—	—	—
DR. CASSIDY	1.30	—	—	1.30	—	—
MR. CORNER	1.30	—	—	—	—	—
MR. SARGENT	—	2	—	—	—	—
MR. NITCH	—	—	2	—	2	—
MR. ADAMS	—	—	—	2	—	2

ATTENDANCE IN THE SPECIAL DEPARTMENTS.

Special Clinical Teaching is given at the hours marked in heavy type.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
MR. FISHER (Eye Dept.)	1.30	—	10	1.30	—	—
MR. HUDSON (Eye Dept.)	—	1.30	1.30	—	1.30	—
DR. FAIRBAIRN (Diseases of Women)	2.30	—	2	—	—	—
DR. HEDLEY (Diseases of Women)						
DR. BOX (Diseases of Children)	—	—	10	—	—	10
MR. ADAMS (Surgical ditto)	—	—	10	—	—	10
MR. HOWARTH (Throat Dept.)	—	—	1.30	—	10	—
DR. STAINER (Skin Dept.)	—	2	11	—	1.30	—
MR. MARRIAGE (Ear Dept.)	1.30	—	—	2	—	—
DR. BUZZARD (Neurological Dept.)	—	—	—	—	—	10
MR. REID (X Ray Dept.)	2	—	2	—	2	—
MR. McKAY (Dental Dept.)	9	9	—	9	9	—
DR. COPE (Vaccination)	—	10.30	—	—	—	—
DR. PERCY SMITH (Mental Diseases)	—	10	—	—	—	—
MR. TIMBERG (Physical Exercise Dept.)	1.30	—	1.30	—	1.30	—
DR. R. C. WINGFIELD (Tuberculosis Dept.)	—	—	3.30	—	—	—
MR. NITCH (Urological Dept.)	—	—	5	—	5	—

SPECIAL DAYS AND HOURS FOR SURGICAL OPERATIONS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Surgical Operations	2	2	2	2	2	—
Gynæcological ,,	—	—	—	2	—	—
Eye ,,	—	—	9	—	—	—
Throat ,,	—	—	—	—	9.30	—
Ear ,,	—	—	9.30	—	—	—

POST-MORTEM EXAMINATIONS.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
DR. BOX	—	2	—	—	2	—
Demonstrators	2	—	2	2	—	10

SCHOLARSHIPS, MEDALS, AND OTHER PRIZES.

The following Scholarships, Medals, and Prizes are open to Students of the Hospital (for full details see pp. 31, 32, 33).

ENTRANCE SCHOLARSHIPS.

Two Open Scholarships in Arts, equivalent to the Tuition Fees for the First Medical Examination.

Two Open Scholarships in Natural Science of the value of £150 and £60 respectively. These Scholarships must be taken out in Tuition Fees.

The University Scholarship of £50 in Anatomy, Physiology and Chemistry. (See page 31.)

At the end of the Second Summer:—

The William Tite Scholarship of £25 (see page 31).

A College Prize of £5.

At the end of the Third Winter:—

The Musgrove Scholarship or the Peacock Scholarship (alternately) of £35.

A College Prize of £10. (see page 31.)

At the end of the Fourth Winter:—

Second Tenure of the Musgrove or the Peacock Scholarship.

At the Examination of the Fifth Winter:—

The Treasurer's Medal to the student who most distinguishes himself (p. 32).

The Hadden Prize for Pathology (see page 32).

Prizes of £10 each for Medicine, Surgery, Midwifery and Diseases of Women. Prizes of £5 each for Public Health, Pharmacology, and Forensic Medicine with Insanity.

At the end of the Sixth Winter:—

The Mead Medal in Medicine, Pathology and Hygiene (see page 32).

The Wainwright Prize in Medicine, Pathology and Hygiene (see page 32).

The Toller Prize in Medicine, Pathology and Hygiene (see page 32).

The Cheselden Medal in Surgery and Surgical Anatomy (see page 32).

Prizes which must be competed for before the end of the Seventh Year:—

The Bristowe Medal in Pathology (see page 32).

The Beaney Scholarship of £50 in Surgery and Surgical Pathology (biennial prize, see page 32).

The Solly Medal and Prize for Reports of Surgical Cases (biennial prize, see page 32).

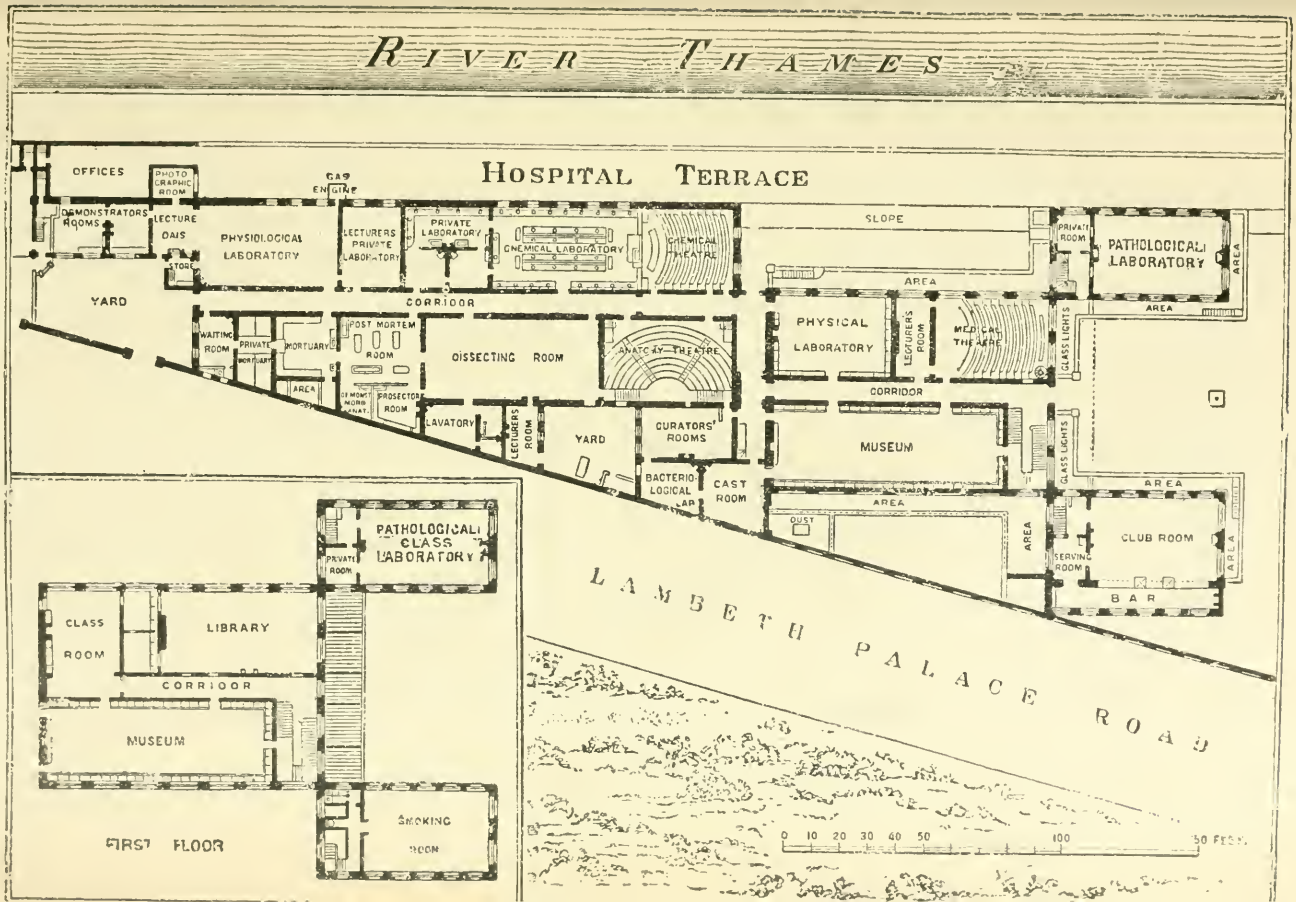
The Sutton Sams Prize for Reports of Cases in Obstetric Medicine (biennial prize, see page 33).

Research Scholarships for Qualified Students:—

The Salters' Company Research Fellowship of £100 in Pharmacology (tenable for three years, see page 33).

The Louis Jenner Research Scholarship of £60 in Pathology (tenable for two years, see page 33).

A Prize of Thirty Guineas known as the Granger Testimonial Prize is awarded annually for work in Anatomy or Physiology (see page 33).


RIVER THAMES
HOSPITAL TERRACE
OFFICES
PHOTO-GRAPHIC ROOM
GAS ENGINE
DEMONSTRATORS ROOMS
LECTURE OMS
STORE
PHYSIOLOGICAL LABORATORY
LECTURERS PRIVATE LABORATORY
PRIVATE LABORATORY
CHEMICAL LABORATORY
CHEMICAL THEATRE
SLOPE
PRIVATE ROOM
PATHOLOGICAL LABORATORY
AREA
YARD
CORRIDOR
WAITING ROOM
PRIVATE MORTUARY
MORTUARY
AREA
POST MORTEM ROOM
DISSECTING ROOM
ANATOMY THEATRE
PHYSICAL LABORATORY
LECTURERS ROOM
MEDICAL THEATRE
GLASS LIGHTS
PROSECTOR ROOM
LAVATORY
LECTURERS ROOM
YARD
CURATORS' ROOMS
CORRIDOR
MUSEUM
BACTERIO-LOGICAL LAB
CAST ROOM
DUST
AREA
SERVING ROOM
CLUB ROOM
BAR
LAMBETH PALACE ROAD
PATHOLOGICAL CLASS LABORATORY
PRIVATE ROOM
CLASS ROOM
LIBRARY
CORRIDOR
MUSEUM
SMOKING ROOM
FIRST FLOOR
0 10 20 30 40 50 100 150 FEET.

DETAILS OF THE SCHOLARSHIPS, MEDALS AND PRIZES.

ENTRANCE SCHOLARSHIPS.

OPEN SCHOLARSHIPS IN ARTS.

Two Scholarships, each equivalent to the Tuition Fee for the First Medical Examination, are offered for competition each year in the third week of July.

These Scholarships are open to any Student who has passed a recognised Preliminary Examination and who is under 20 years of age. Successful competitors must enter at once as Students of the Hospital. The subjects are English, Arithmetic, Algebra and Geometry, together with any three of of the following: French, German, Latin, Greek, Chemistry, and Physics. The Examination is conducted by papers.

The standard is that of the Matriculation Examination of the University of London.

Candidates are required to send in their names and evidence of their eligibility, to the Medical Secretary, not later than July 1st.

OPEN SCHOLARSHIPS IN NATURAL SCIENCE.

Two Scholarships, of the value of £150 and £60 respectively, are offered for competition annually, after an examination in Physics, Chemistry, and Biology.

These Scholarships are open to all Students not exceeding 24 years of age who have passed a recognised Preliminary Examination in Arts, and have not received instruction in Anatomy or Physiology, without any condition as to their becoming Students of the Hospital, except in the case of successful Candidates, who must enter at once for the remainder of the curriculum and take out the Scholarship in Tuition Fees. The Examination will be conducted by means of written papers and practical work. The standard will be that of the First Examination for Medical Degrees of the University of London. Competitors are required to send in their names and Certificate of Birth and of Preliminary Examination to the Medical Secretary not later than July 1st, the Examination is held in the latter part of that month.

UNIVERSITY SCHOLARSHIP.

A Scholarship of the value of £50 will be offered for competition in *any two* of the following subjects: Anatomy; Physiology; Chemistry, in its relations to Medicine and Physiology. It is open to Students who have completed their examinations in Anatomy, and Physiology, for a Medical Degree in any of the Universities of the United Kingdom or the Colonies, and who have not entered for Clinical work in any London Medical School before the commencement of the Summer term of the year in which the Examination is held. Candidates may specialise in one of the two subjects taken, or treat each subject as of equal value. In the former case two-thirds of the total marks obtainable in the examination will be allotted to the subject of choice. But, to be eligible for the Scholarship, a competitor must gain at least one-third of the marks allotted to the subsidiary subject. The successful Competitor must take out the Scholarship in Tuition Fees at St. Thomas's Hospital.

The Examination is held in the latter part of September.

The WILLIAM TITE Scholarship, founded by the late Sir W. TITE, C.B., M.P., F.R.S., of the value of about £25 is awarded each year to the Student placed highest in the 1st Class List in the examinations at the end of the second Summer Session. Preference, in case of equality between Students, is to be given to the son of a medical man, and more particularly of one who has been educated at St. Thomas's Hospital or is in Practice in Bath.

The MUSGROVE Scholarship, founded by Sir JOHN MUSGROVE, Bart., the late President of the Hospital, of the value of about £35 is awarded biennially to the Student who shall take the highest place in the 1st Class List in the

examinations at the end of the third Winter Session. It is tenable for two years, provided the holder has worked during his fourth year to the satisfaction of the School Council.

The PEACOCK Scholarship, founded by the will of the late Dr. THOMAS BEVILL PEACOCK, for many years Physician, and at the time of his death Consulting Physician to St. Thomas's Hospital, is of the same value as the Musgrove Scholarship; is awarded and held upon the same terms; and is given every other year in alternation with that Scholarship.

The TREASURER'S MEDAL is awarded to the Student who most distinguishes himself in the subjects of the Examination held at the end of the Fifth Winter.

The HADDEN PRIZE (in memory of the late W. B. HADDEN, Assistant Physician, 1885—1893), is awarded at the Examination at the end of the fifth Winter as the prize for Pathology.

The MEAD MEDAL, founded by Mr. and Mrs. NEWMAN SMITH (in honour of Richard Mead, Physician 1703—1714) is awarded annually to a Sixth Year's Student,* in respect of a Special Practical Examination in Medicine, Pathology and Hygiene. The marks are allotted as follows: Medical Commentaries, 240; Viva Voce on Medical Cases, 100; Paper on Pathology, including one question on Public Health, 100; Viva Voce on Pathology, Histology and Morbid Anatomy, 100; Ophthalmic Cases, 20; Throat Cases, 20; Skin Cases, 20. Total 600.

The WAINWRIGHT PRIZE, £10, founded by the present Treasurer, is awarded annually to a Student from Oxford or Cambridge University under conditions similar to those for the Mead Medal.

The SEYMOUR GRAVES TOLLER PRIZE, founded by Dr. E. TOLLER (in memory of his son, S. G. Toller, elected Assistant Physician, 1897), is awarded annually to the most distinguished competitor at the Examination for the Mead Medal and Wainwright Prize.

The CHESELDEN MEDAL, founded by the late GEORGE VAUGHAN, Esq. (in honour of William Cheselden, elected Assistant Surgeon, 1719), is annually awarded to the Sixth Year's Student* who most distinguishes himself in respect of a Special Practical Examination in Surgery and Surgical Anatomy. The marks are allotted as follows: Surgical Commentaries, 100; Surgical Cases, 100; Dissections, 100; Surgical Operations, 100; Viva Voce in Surgical Appliances and Morbid Specimens, 100; Viva Voce on Anatomy, 100. Total 600.

The BRISTOWE MEDAL (in memory of the late Dr. J. S. Bristowe, F.R.S., Assistant Physician and Physician 1854—1892), is awarded annually in respect of a special Practical Examination in Pathology and Morbid Anatomy. The examination is held in the first half of the Winter session. Students are eligible who have completed the Fifth but not the Seventh year of Medical Study. At least three years of this time must have been passed at St. Thomas's Hospital.

The BEANEY SCHOLARSHIP, founded by the will of the late Dr. BEANEY, of the value of £50, is awarded biennially, after an examination in Surgery and Surgical Pathology, to a student who shall have completed his fifth but not his seventh year. The examination is held during the Summer Session

The SOLLY MEDAL (in memory of the late Samuel Solly, elected Assistant Surgeon, 1841), together with a Prize in Money, is awarded biennially. Those Students are eligible to compete who are of from four to seven years' standing. The award is made for the best series of Reports of Surgical cases coming under the Student's personal observation in the Wards, not, however, to exceed ten in number. Reports must be sent in not later than March 21st.

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* A Sixth Year's Student is a Student of the Hospital who has just completed 3 winters' Clinical work, irrespective of the institution at which the Clinical Appointments were commenced.

The SUTTON SAMS MEMORIAL PRIZE, is awarded biennially for the best series of Reports of Cases in Obstetric Medicine, including Midwifery and the Diseases of Women. Reports must be sent in not later than June 30th.

The SALTERS' COMPANY RESEARCH FELLOWSHIP of the annual value of £100 has been established and endowed by the Salters' Company, with a view to the promotion of research in Pharmacology. The Fellowship is awarded to a properly qualified person by the Company on the nomination of the Treasurer of St. Thomas's Hospital and a Committee of Selection. It may be held for a term of three years, the Fellow carrying on his researches at St. Thomas's Hospital and giving annual evidence of the performance of satisfactory work to the Committee of Selection. The Fellow is required to devote his whole time to research and to hold no other office or appointment except by special permission of the Salters' Company, granted on the strong recommendation of the Committee of Selection.

The LOUIS JENNER RESEARCH SCHOLARSHIP was founded by the DOWAGER LADY JENNER in memory of her son, Dr. Louis Leopold Jenner. It is of the annual value of £60 and is instituted for the encouragement of original research into the cause, nature and process of disease. The Scholarship is tenable for one year with the possibility of extension of tenure for a second year subject to approval of the Medical and Surgical Officers and Lecturers. The Scholar must be qualified and a Student of the Hospital. The tenure of the Scholarship dates from May 1st of each year and the investigation must be carried on in or in connection with the Louis Jenner Laboratory of Clinical Pathology.

The GRAINGER TESTIMONIAL PRIZE.—The holder of this prize has to prepare, under the direction of the Lecturers on Anatomy and Physiology, a series of specimens illustrative of recent Anatomical or Physiological research, and at the end of a year receives, if his work has proved satisfactory, an honorarium of thirty guineas. The appointment is annual and is in the hands of the School Council.

APPOINTMENTS.

(All these Appointments are open to Students without extra payment.)

A RESIDENT ASSISTANT PHYSICIAN and a RESIDENT ASSISTANT SURGEON, at a salary of £150 per annum each, are from time to time appointed. The appointments are annual, but the tenure of office may be renewed for a term not exceeding one year.

TWO HOSPITAL REGISTRARS, at an annual Salary of £150 each, are appointed in each year. They are eligible for annual re-appointment, but may not hold office for more than two years. Preference will be given to Students of the Hospital who have specially distinguished themselves and have completed their studies in the School.

AN OBSTETRIC TUTOR AND REGISTRAR is appointed each year, at an annual salary of £50. He is eligible for annual re-appointment, but may not hold office for more than three years consecutively. The holder of the office takes part in the tutorial instruction of students, under the direction of the Obstetric Physicians.

AN OPHTHALMIC REGISTRAR who acts as a Senior Assistant in the Department and is paid at the same rate as the Obstetric Registrar.

AN ASSISTANT IN THE LOUIS JENNER CLINICAL LABORATORY, at a salary of £100 per annum

AN ASSISTANT PATHOLOGIST at a salary of £125 per annum. The last two are subject to annual re-election.

House Appointments, open to Students who have obtained their diplomas.

(The duties of House Physicians, House Surgeons and Clinical Assistants commence on the first Tuesday, and those of Casualty, Obstetric and Ophthalmic Officers on the third Tuesday in February, May, August and November.)

RESIDENT HOUSE PHYSICIANS, RESIDENT HOUSE SURGEONS, and CASUALTY OFFICERS are selected every three months. All these Officers are provided with Rooms and Commons by the Hospital, free of expense, and hold office for six months, if recommended for re-election.

A SENIOR and a JUNIOR OBSTETRIC HOUSE PHYSICIAN are selected every three months. Both are provided with Rooms and Commons in the Hospital, free of expense.

A SENIOR and a JUNIOR OPHTHALMIC HOUSE SURGEON are appointed every three months; the Senior is provided with Rooms and Commons in the Hospital, free of expense.

CASUALTY ASSISTANTS and CLINICAL ASSISTANTS in the Departments for Medical and Surgical Diseases of Children, for diseases of the Throat, Skin, Ear, and in the Mental, Neurological, Urological, Electrical, X Ray, and Physical Exercise Departments, are appointed every three months.

Appointments for Students before Qualification.

CLINICAL CLERKS and DRESSERS to In-patients are selected to the number of at least 100 each year, from amongst the most eligible pupils. The DRESSER on Accident Duty is provided with a Room and Commons in the Hospital. CLINICAL CLERKS and DRESSERS for the Out-patients are also appointed, to the number of at least 80 to 100 each year; applicants for Clerkships or Dresserships are required to have passed the 2nd examination of the Conjoint Board, or an equivalent examination.

CLINICAL CLERKS must attend a course of instruction in Elementary Clinical Medicine (p. 19). *(The Duties commence on the third Tuesday in January, April, July and October.)* CLINICAL CLERKS TO THE ANÆSTHETISTS are also appointed to hold office for three months.

DRESSERS must attend the Lectures on Practical Surgery and also (during their first three months) the Special Classes held by the Surgical Registrar, and the Lecture on Anæsthetics.

CLINICAL CLERKS and DRESSERS to the various SPECIAL DEPARTMENTS are elected from amongst those Students who have finished their terms as Clerks and Dressers in the Wards and Out-patient Departments.

GYNÆCOLOGICAL and OBSTETRIC CLERKS are appointed, in rotation, from a list of Students who have entered their names for the purpose. They must have attended Lectures on Midwifery and a course of Elementary Practical Obstetrics, have passed the "Second Conjoint," or an equivalent Examination, and have held the offices of Clinical Clerk and Dresser. Each Clerk holds office for three months, and Special Certificates are awarded to those Gentlemen who have satisfactorily attended Sixty Maternity cases. An allowance is made towards the cost of board and lodging. (See also page 11.)

Students are appointed to act as ASSISTANTS in the CLINICAL LABORATORY, the PATHOLOGICAL LABORATORY and the POST-MORTEM ROOM.

ASSISTANTS TO THE TEACHERS OF PRACTICAL AND MANIPULATIVE SURGERY are appointed for the Winter Session.

ASSISTANTS TO THE LECTURER ON MATERIA MEDICA are appointed for the Summer Session.

ASSISTANTS IN THE CHEMICAL DEPARTMENT are selected from those who have passed the FIRST EXAMINATION FOR MEDICAL DEGREES, UNIV. LOND., or who are similarly qualified.

ASSISTANTS IN THE PHYSIOLOGICAL LABORATORY are selected from Students who have completed their Second Winter Session.

ANATOMICAL REGISTRARS and PROSECTORS are appointed in the early part of the Winter Session, also ASSISTANTS TO THE LECTURER ON ELEMENTARY BIOLOGY.

REGULATIONS FOR THE EXAMINATION AND CLASSIFICATION OF THE STUDENTS AT THE MEDICAL SCHOOL.

1. In accordance with the Regulations of the Qualifying Bodies, Students must attend the Class Examinations in the subjects for which they have to be certified, and show by their answers to the questions that they have paid proper attention to the Lectures, otherwise the signature to their Schedules may be withheld.

2. There shall be held at least two Examinations in the 2nd and 3rd Winter and one in the 2nd Summer Session in each subject on which attendance is required during that Session, and the marks obtained in these Examinations shall be the basis for the Classification of Students and the Award of Prizes for each Session respectively. Provided that any extra Examination in the course of the Session, in any subject, be not allowed to interfere with the ordinary Lectures in other subjects.

3. The number of marks allotted to each subject in the following Schedule is not to be exceeded in case the number of Examinations held during the Session be more than two, but must be distributed amongst the several Examinations.

4. Students must obtain at least one-third of the total number of marks in each subject, and not less than two-thirds of the total number allotted to all the subjects collectively, to be placed in the 1st Class.

Those who have obtained one-third of the total number of marks allotted to all the subjects collectively are placed in the 2nd Class.

The names of those who do not obtain either a 1st or 2nd Class position are not published, but a General List showing the exact position of each Student at every Examination is kept by the Secretary, from whom any Student can learn his own position, but no Lecturer shall make known to Students the number of marks obtained by any Student in any subject.

5. The Prizes shall be awarded to the Students holding the 1st and 2nd positions in the 1st Class of each Winter Session, and to those holding the 1st and 2nd positions of the 1st Class in the second Summer Session.

6. The Authorities reserve the right of withholding any prize, if no competitor of sufficient merit presents himself.

7. Attendance and satisfactory performance at the Fifth Year's Examination is compulsory upon all Students who desire to hold a House Appointment, or an appointment as Clinical Assistant in a Special Department. To be eligible a Student must have completed two years' Clinical work, irrespective of the Institution at which the work was commenced.

2nd YEAR'S SUBJECTS.

WINTER ...	Anatomy	Viva. (Dec.)	50
	Physiology.	Viva. (Dec.)	50
SUMMER ...	Anatomy	Paper	100
	Physiology	Paper	100
	Anatomy	Viva.	100
	Physiology	Viva.	100
	Pharmacy	... ...	100
			600

3rd YEAR'S SUBJECTS.

WINTER ...	Anatomy.	Paper (March)	100
		Viva. (Dec.	50
		Viva. (March)	50
	Physiology.	Paper (March)	100
		Viva. (Dec.)	50
		Viva. (March)	50
			400

5th YEAR'S SUBJECTS.

Medicine 120.
Surgery, Practical Surgery and Ophthalmology 120.
Midwifery and Diseases of Women 120.
Pathology 60.
Pharmacology and Therapeutics 30.
Forensic Medicine and Insanity 20 each.
Public Health 30.

Every Student must take up at least three subjects, one of which must be either Medicine or Surgery.

FEES.

I. COMPOSITION FEES.

A. Students entering for the First Examination for Medical Degrees of London University or the 1st Conjoint Examination.

Composition Fee:—For the full course of 1 year or less .. ... 15 Guineas.
For each subsequent six months, or less ... 8 ,,

These fees include the cost of all materials used in the practical classes.

B. Students who have passed the First Examination for Medical Degrees or corresponding examinations.

Entrance Fee. For students commencing the study of Anatomy and Physiology ... ... 20 Guineas.
Annual Composition Fee ... ... 30 ,,

C. Students from the Universities, who have commenced but not completed their study of Anatomy and Physiology.

Entrance Fee ... ... 15 Guineas.
Annual Composition Fee ... ... 30 ,,

D. Students who have passed the Oxford 1st M.B., Cambridge 2nd M.B., Second Examination for Medical Degrees (Part II.) Univ. Lond. or corresponding examinations, and join the school for Clinical Study.

Entrance Fee ... ... 10 Guineas.
Annual Composition Fee ... ... 30 ,,

Regulations regarding Composition Fees.

1. The Entrance Fee under Sections B, C & D, is due from every student on the day of his admission to the School.

2. The Annual Composition Fee is due in advance on the first day of the term in which the student enters, and on the corresponding day of each successive year, until he has obtained either a Medical Degree of a British University, the diploma of the Conjoint Board in England, or such other registrable qualification as may be approved from time to time by the School authorities.

3. A student who obtains one of the above qualifications within three months of the date on which his last annual composition fee became due, will be allowed a rebate of 20 guineas ; if within six months, 10 guineas.

4. The payment of the entrance fee and annual composition fee entitles a Student, during the twelve months following the date on which each annual fee becomes due, to attend the full practice of the Hospital, all lectures, demonstrations and other instruction provided by the School for students of his standing (with the exception of such courses as may from time to time be specially excluded) ; to compete for prizes, and, if selected, to hold appointments in the Hospital.

The regular course includes the Special Classes to prepare Students for the Second Examination for Medical Degrees, Univ. Lond., and Primary F.R.C.S. Examinations, provided that these Examinations are taken before qualification.

5. The course of study pursued by a student paying annual composition fees must be continuous, unless the authorities of the School in particular cases, on the ground of illness, or other cause which may appear to them sufficient, shall otherwise determine.

6. A student who has paid an entrance fee with two or more annual composition fees, who has worked to the satisfaction of the Medical School Committee, and who has obtained one of the qualifications referred to in paragraph 2, may hold resident and other appointments without further payment, and becomes a Perpetual Student.

No charges are now made for materials and apparatus, but Students must pay for the "parts" they dissect at rates which may be ascertained in the Library.

Students must provide themselves with Microscopes and Dissecting Instruments.

II. EXTRA CLASSES.

(Not covered by the Composition Fee.)

These must be attended by all Medical Students to meet the requirements of the various Examining Boards, and are arranged for by the School Authorities.

Vaccination (January, May, October) ...	1½ guineas.
Practical Pharmacy (Every Session)	3 guineas.
Attendance at a recognised Fever Hospital...	3 guineas.

III. FEES FOR COURSES NOT INCLUDED IN THE COMPOSITION FEE.

Primary F.R.C.S. (for Candidates who are qualified from St. Thomas's Hospital)	10 guineas.
Primary F.R.C.S. External Students	15 guineas.
Final F.R.C.S.—St. Thomas's Students	10 guineas.
„ External Students	15 guineas.
Advanced Operative Surgery (including material)	5 guineas.

IV. HOSPITAL PRACTICE.

(For other than those who enter for the full Curriculum.)

The following are the fees payable by those who desire to attend the Practice of the Hospital for limited periods, including Lectures and Post-mortem Inspections. The payment of these fees renders the Student eligible for Hospital appointments :—

For three months' Hospital Practice	15 guineas.
Six months' „ „	25 guineas.
One year „ „	40 guineas.

LECTURES, DEMONSTRATIONS AND CLASSES.

Single Courses of Lectures, Demonstrations and Classes in any of the Subjects taught in the school may be attended on payment of fees that may be ascertained on enquiry at the Secretary's Office.

The full Fees payable to the School for the time in which a qualification should be taken are :—

	£	s.	d.
1st year	15	15	0
2nd year entrance fee	21	0	0
One year's fee	31	10	0
Fees for 3rd, 4th and 5th year	94	10	0
Vaccination, Pharmacy and Fevers	7	17	6
	£170	12	6

For University Students (entering for Clinical work) :—

	£	s.	d.
Entrance Fee	10	10	0
2 years' fees	63	0	0
Vaccination, Pharmacy and Fevers	7	17	6
	£81	7	6

AMALGAMATED CLUBS.

The Social Club occupies the East Wing of the Medical School buildings, and consists of two fine rooms, each of which is over fifty feet in length, and of proportionate width.

On the ground floor is the Restaurant, which is under the control of a combined committee of Staff and Students.

On the first floor is a commodious Reading and Smoking room which is provided with the current literature of the day, and has lately been re-furnished.

In the basement of the west wing is a fully equipped modern Gymnasium.

All the Clubs were amalgamated in July, 1888, and are maintained by the subscriptions of the members, and by a yearly grant from the Medical and Surgical Officers and Lecturers.

The Amalgamated Clubs comprise the Students' Club, the Medical and Physical Society, the St. Thomas's Hospital Gazette, and the following Clubs :—Athletic, Cricket, Football (Rugby and Association), Lawn Tennis, Hockey, Rifle, Boxing, and Swimming.

CLUB GROUND.

The Council of the Amalgamated Clubs are in possession of a Cricket, Football, and Lawn Tennis Ground, of more than nine acres in extent, provided with a commodious pavilion. It is situated within five minutes walk of the L. & S. W. Railway Station at Chiswick, and can be reached within forty minutes from the Hospital. Cheap return tickets (7d., 3rd class) can be obtained.

The Subscription to the Amalgamated Clubs is £3 3s. and must be renewed Annually on the date of entry. After the payment of five consecutive subscriptions the Student becomes a Life Member, provided he has obtained a registrable qualification.

ST. THOMAS'S HOSPITAL MEDICAL AND PHYSICAL SOCIETY.

President.—E. M. Corner, M.C. Cantab.

Hon. Treasurer.—Prof. F. G. Parsons.

Hon. Secretaries.

Mr. A. H. Clarke. Mr. O. H. Hyman.

This Society was founded in the early part of the last century by students of the Hospital, and has for its object the reading and discussion of papers on Medicine, Surgery, and subjects of general interest, the narration of cases, and the exhibition of specimens of Physiological and Pathological interest. The Meetings are held in the Students' Club on alternate Thursdays at 8.30 p.m., and terminate not later than 10 p.m.

Further information can be obtained of the Hon. Secretaries.

ST. THOMAS'S HOSPITAL GAZETTE.

The Gazette was founded in 1891, and since then has appeared monthly during the Winter and Summer Sessions. It records the current events of the Hospital and School, including reports of the various sections of the Amalgamated Clubs, and of the proceedings of the Medical and Physical Society. Articles are contributed by Members of the Staff, and by past and present Students, dealing with new methods of treatment and technique, as seen in the practice of the Hospital, and with medical work and life at home, abroad and in the Services. Photographs and illustrations are frequently inserted. In this way the Gazette endeavours to be a common interest to all Members, past and present, of the Medical School.

The Gazette is supplied without further payment to those who subscribe annually to the Amalgamated Clubs. Subsequently it may be obtained by an annual subscription of 5s., or by a Composition at the rate of 1 guinea for 5 years, or 3 guineas for life.

ST. THOMAS'S HOSPITAL REPORTS.

VOL. XLIII., NEW SERIES,

EDITED BY

J. J. PERKINS, M.A., M.B. Cantab.
C. A. BALLANCE, M.V.O., M.S. London.

Will be Published in due Course.

The Volume will contain the Statistical Reports of the Hospital to December 31st, 1914. A General Index to Vols. I. to XXV. appeared in Vol. XXVI. and to Vols. XXVI. to XXXVII. in Vol. XXXVII. The New Series commenced in 1870.

Intending Subscribers are requested to communicate with Mr. G. Q. Roberts, the Secretary of the Medical School, at the Hospital, to whom P.O. Orders on the Westminster Bridge Office are to be made payable.

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